

Building a Model to Measure Human Capital at Antioch Syrian Private University

-A Case Study -

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ABSTRACT:

The research aimed to test a method for measuring human capital at Antioch Syrian Private University, based on the relative importance of the components that constitute human capital at the university, To achieve this objective, the relative importance of the components of human capital and its controlling factors was determined, including: qualifications and personal traits, group performance elements, and organizational culture. Weighted scores or a main relative index were assigned to elements specific to the teaching staff and administrative personnel, which were then subdivided into secondary indicators for each component. A comprehensive inventory approach was applied to all human resources at the university, totaling 167 individuals divided into two categories: academic staff: 116 faculty members across the university's colleges. administrative staff: 51 employees.

The research successfully derived a relative index expressing the actual value of human capital, revealing that the relative importance of human capital reached **75.14% for teaching staff** and **70.01% for administrative staff**. These results indicate that human capital holds relatively high importance at the university, and there are opportunities to further enhance and elevate this importance to higher levels.

One of the most important findings of the research is that it revealed the presence of efficiency in human resources, as indicated by the high level of qualifications, except for technological knowledge, and specialization in fields different from the core disciplines, which were somewhat moderate. The study also revealed a high level of personal elements, particularly in terms of creative abilities among human resources and their intrinsic motivation to improve and develop their work, as well as their commitment to quality requirements at the university. However, the research found a decline in collective performance at the university due to low job satisfaction regarding wages and incentives, as well as a lack of teamwork culture, which affected cooperation and a sense of belonging. This was despite the high level of willingness to collaborate and intrinsic motivation among human resources as a personal element. Additionally, the study showed that the culture of quality was moderately prevalent at the university, while work values were highly prevalent. Furthermore, the university lacked clear strategies for managing, developing, and modernizing its human resources, which are among the most critical factors in developing human capital. This lack of strategic focus contributed to a decrease in the proportion of effective human capital.

Keywords: Antioch Syrian Private University, Human Capital

INTRODUCTION:

The contemporary world has witnessed a revolution in information and communication technology, which has controlled and continues to control all aspects of life: economic and social. The knowledge economy has emerged, where knowledge has become one of the most important elements of production. Organizations must manage their knowledge scientifically to foster creativity and stimulate innovation. Hence, the focus on human capital, which is the cornerstone of the development of science and scientific research, and the management and use of knowledge within the framework of the knowledge economy, which is the primary driver of other production elements and effectively contributes to achieving returns, reaching desired growth, and maximizing the value of the enterprise, solidifying its position in the market of goods and services.

With the focus on human capital, there has been an increased interest in its quantitative measurement to determine its size and proportion relative to other production elements. The topic of measuring human capital has become one of the contemporary issues that require scientific research to address, especially concerning the measurement of skills and competencies of individuals

and groups, and the identification of its components, as it is one of the components of intellectual capital, enabling institutions to measure, manage, and invest it optimally.

This study focuses on the problems of measuring human capital at Antioch Syrian Private University, given the unique role of universities as the primary contributor to the development of human capital, its use, the primary incubator of human capital, and the primary investor in knowledge for the development of human capital, due to their creative human resources, advanced scientific capabilities, and unique abilities that enable them to efficiently invest and transform it into a competitive advantage, helping them achieve a unique position among their peers in other universities.

PROBLEM OF THE STUDY

Private and public universities play a prominent role in qualifying human cadres scientifically and practically, enabling them to build society and achieve its renaissance in economic, social, scientific, and technical aspects. This role becomes increasingly important in the context of rampant inflation, which has weakened human resources both quantitatively and qualitatively, and with the exacerbation of the current crisis that is destroying the economies and societies of countries.

Dealing with human resources as a production element, whether in institutions producing goods or those providing services such as universities, requires their quantitative measurement, based on the principle: "What cannot be measured cannot be controlled," similar to other production elements. Measurement enables the determination of the size and viability of human capital, and planning for its development and increased effectiveness. Hence, the research focuses on the issue of measuring human capital at Antioch Syrian Private University, in its two categories: administrative staff and academic staff.

The university has its unique characteristics that call for attention to human capital. It is a newly established university, still in the growth phase, under poor economic and social conditions that directly affect its human resources. This necessitates attention to its human resources to enable planned, organized, and programmed growth, based on accurate data about these resources.

Additionally, there is a continuous increase in the number of public and private universities, which means increased competition among them, pushing them to focus on their human resources to preserve and develop their performance, giving the university a unique advantage among other universities, especially when focusing on learning, scientific research, creativity, and innovation. Measuring human capital helps the university manage its human resources effectively by enhancing their performance, developing their knowledge, capabilities, and skills, and reaching the specifications defined in the standards of educational service quality. This directly reflects on the level of its graduates, enabling them to enter the job market confidently without difficulties.

Measuring human capital requires, first, identifying its components and the factors influencing its measurement. Then, it is necessary to determine the value of these components within a "holistic" framework of the total elements whose interaction and integration determine the value of human capital. It also requires determining the measurement considerations, such as its conditions, tools, and the factors controlling human resources and their competencies.

From the above, the research problem can be posed through the following question:

The research problem can be formulated through the following two questions:

1. What are the factors controlling the elements of human capital at the university?
2. What is the appropriate quantitative model for measuring human capital at Antioch Syrian Private University?

STUDY OBJECTIVES:

The research aimed to test a proposed model for measuring the relative importance of human capital at Antioch Syrian Private University

This main objective branches into the following sub-objectives:

1. Identifying the factors controlling the elements of human capital at the university.
2. Developing a quantitative model to measure human capital at Antioch Syrian Private University.

IMPORTANCE OF THE STUDY:

The importance of the research lies in the fact that its results can contribute to.

1. Supporting the university administration in formulating its strategies related to human resources, developing plans for attracting, employing, compensating, and covering the expenses of performance development, as well as retaining them, whether it concerns administrative staff or academic personnel.
2. Revealing the aspects that control the measurement of human capital. drawing the attention of the accounting profession in Syria to the importance of measuring human capital in productive and service institutions during a critical phase, where human resources represent the decisive factor in overcoming challenges.
3. Opening new horizons for research in the field of human capital measurement, whether in productive or service institutions.

LIMIT OF THE STUDY:

1. Timeframe: The field study, which included distributing questionnaires and studying human resource files at Antioch Syrian Private University, was conducted during the fourth quarter of 2024.
2. Spatial Scope: The spatial scope is limited to Antioch Syrian Private University.

STUDY METHODOLOGY AND TOOLS:

The research is based on testing a proposed model to measure the relative importance of human capital at the Syrian Private University of Antioch. Therefore, the steps for completing the research have been determined according to the following stages:

First Stage: Referring to relevant scientific references and sources.

Second Stage: Preparing the applied study according to the following stages:

- Identifying the components of human capital at the university, relying on scientific literatures and compiling the components of human capital, classifying these components, and adding other elements in a way that suits the study population to determine the components of human capital at Antioch Syrian Private University, which are qualifications, personal elements, group performance elements, and organizational culture.
- Assigning weighting scores or relative indicators to these elements for the academic staff and administrative employees, then aggregating them into a single composite indicator for each category separately, within a "holistic" framework of the total elements whose interaction and integration determine the value of human capital. The proposed human capital indicator in this study was developed based on the intellectual capital indicator (IC-INDEX) mentioned in Al-Koumi's study (2012), where individual indicators are aggregated into a single composite indicator, clarifying the total value of intellectual capital. To build this model, the organization's strategy must be determined, then the components of intellectual capital are identified, followed by assigning weighting scores to these components according to their relative importance, and this model helps in linking the organization's strategy with the elements of intellectual capital (Al-Koumi, 2012, p. 312).
- Developing a checklist to collect data for the proposed model, including items that measure the actual presence of human capital at the university according to the elements specific to the academic staff and administrative employees. Simultaneously with data collection through the checklist, the researcher collected data from employment contracts, records, files, and documents related to human resources at the university. The prevailing conditions at the university were also studied, including the extent to which the university adheres to quality standards and the existence of a strategy for developing human resources, in addition to the management style and work values at the university, which can help identify the factors controlling human capital. Personal interviews were conducted with officials from the Accreditation and Quality Directorate and the Human Resources Directorate, as well as with most academic staff and administrative employees at the university. All data were collected, prepared for processing, and converted into information.
- Processing the data and converting it into information according to the following stages:
 1. After identifying the basic components of human capital at the university, the number of elements reached 4, and the relative importance of each element was distributed.
 2. Then, each component was distributed into sub-components according to the relative importance of its components, as shown in the proposed indicator.
 3. The actual relative weight of each element was determined. Then, the relative weights of the elements were summed to determine the relative weight of the broader component, and so on, until reaching the relative weight of human capital at the university.

To carry out this research work, two main sources were relied upon to obtain data and information:

1. Primary Sources: Represented by collecting data through employment contracts, records, files, and documents related to human resources at Antioch Syrian Private University, in addition to developing a checklist supported by human resource files and records at the university to identify their personal elements, group performance elements, qualifications, and experiences, as well as the university's culture and its effectiveness.
2. Secondary Sources:
 - References and sources available in libraries, to build the theoretical framework and review previous literature on this research, including books, specialized journals, university theses, and electronic websites.
 - Personal interviews with officials from the Accreditation and Quality Directorate and the Human Resources Directorate, as well as with most academic staff and administrative employees at the university.

DEFINITION OF STUDY TERMS:

Human Capital: All human resources with distinguished capabilities to occupy administrative and technical positions, possessing creative and innovative abilities, including the advanced knowledge of workers, their accumulated experiences from life and work, their technical and professional skills, connected to their level of satisfaction, morale, and cohesion as an integrated team (Al-Faraj, 2021, p. 207).

Measuring Human Capital: The International Accounting Standards Committee (IASC) defined measurement as the process of determining the monetary values of elements to be recognized in financial statements, which

The researcher believes that **measuring human capital** can be defined as "representing the attributes or characteristics of human resources with numbers that represent their knowledge, skills, abilities, and experiences, taking into account the controlling factors, to recognize their existence and disclose them appropriately."

NECESSITIES OF MEASURING HUMAN CAPITAL IN ACADEMIC INSTITUTIONS:

Attempting to measure and disclose human resources is not part of traditional accounting procedures. Recently, there has been increased interest in this type of measurement due to its significant impact on the work and development of economic units.

Through this, the necessities of measuring human capital in academic institutions can be clarified as follows:

- Measuring human capital makes financial statements reflect the value of the university and the resources and assets that represent its true wealth or value.
- The urgent need to develop standards used in calculating the value of cognitive abilities to convince university management and owners of the justifications for focusing on and investing in them.
- It reveals the characteristics and capabilities of employees at the university and identifies those with creative abilities.
- The process of measuring human capital is useful in linking knowledge with employee performance at the university, and it allows for predicting individual behavior in the future.
- Assisting management and human resource specialists in making appropriate decisions regarding investment in human resources and providing information to all users, determining the role of human resources in increasing income and the university's development.
- Evaluating the efficiency of human resources in academic institutions and their role in achieving higher productivity, which reflects on the university's performance and profitability, thus achieving a competitive advantage over other universities.
- Measuring human capital in academic institutions will shed light on its importance, leading to the development of social thought and viewing it as an element of high economic value, changing the idea that human resources are merely production tools.
- Providing investors with information about the value of human assets at the university, to make their investment decisions regarding acquisition, retention, or disposal of their ownership in the university.
- Providing comparative information about the costs and benefits associated with investment in human resources, thus enabling the university to prepare an accounting system that takes into account accounting for human resources and preparing accounting records for recording, classifying, and measuring elements of recruitment, appointment, training, promotion, and revenues achieved from investment in human resources at the university.

MODELS FOR MEASURING HUMAN CAPITAL AND THEIR APPLICABILITY IN ACADEMIC INSTITUTIONS

After discussing the concept of human capital measurement, we can present the most important models for measuring human capital as addressed by researchers, based on the nature of accounting data and the operations of economic units. Al-Hilali (2011) noted that there are two approaches to measuring human capital in various institutions: quantitative and descriptive. Descriptive models are more commonly used in academic institutions due to the characteristics of human knowledge, which is intangible and non-material, making it difficult to measure directly. Therefore, human capital in academic institutions is measured by identifying a set of indicators for each of its various aspects (Al-Hilali, 2011, p. 28).

Researchers also argue that there are two main accounting models for measuring human resources: one based on value and the other on cost. The most important models for measuring human capital can be outlined as follows:

- **Descriptive Models:** these models describe the characteristics of descriptive measures and focus on identifying the traits and features of human capital. They rely on surveying opinions and attitudes that are important for their indirect impact on knowledge processes).

The researcher believes it is essential to rely on descriptive models as an initial step for measuring human capital. These models can provide an evaluation that reflects the effectiveness of human capital in academic institutions and identifies the key traits present in reality. However, it is crucial not to rely solely on respondents' answers obtained through questionnaires or personal interviews. Instead, these should be supplemented with other tools, such as reviewing their files, CVs, and references provided by them to verify their professional and academic reputation. These models should also be supported by other models to measure human capital quantitatively or in terms of value in subsequent stages, which is the approach adopted in this study.

- **Behavioral Models:** these include models like Likert's model of cause, intervention, and final outcome. These models are based on measuring human capital according to human behavior, which changes over time. Human behavioral measures are determined by the ability to work, willingness, performance levels, and ultimately, the measurement of human productive efficiency (Al-Fadl et al., 2002, p. 119). The researcher notes that most models focus on estimating individual value to measure human capital, while this model emphasizes evaluating collective performance elements in institutions and the causal variables controlling human capital measurement. This approach was adopted in this study to measure collective performance elements for assessing human capital in the university.

Value-Based Models: these models measure human capital based on the ability to provide future economic benefits or services. Examples include:

- **Unpurchased Goodwill Model:** Proposed by Roger H. Hermanson, this model estimates the value of human resources by capitalizing the excess earnings of an institution compared to the average earnings of similar entities in the industry. It is also known as the return on assets model (Hamada, 2002, p. 151).

Competitive Bidding Model: Proposed by Hekimian and Jones, this model involves managers bidding for the services of key employees within their departments. The highest bid represents the individual's value, reflecting the optimal use of their services. However, this model is only applicable to a small group of human resources within the institution (Hamada, 2002, pp. 151, 154).

- **Present Value of Future Earnings Model:** Developed by Lev and Schwartz (1971), this model uses the economic concept of human capital, deriving from Irving Fisher's theory that capital is the source of future income flows, and its value is the present

value of discounted future earnings. According to this model, human capital is determined by the future earnings an employee will receive until retirement (Hamada, 2002, p. 152).

- **Reward Valuation Model:** Proposed by Flamholtz (1971), this model is based on economic theory, where the value of human resources is not just their cost but the expected benefits they generate. The value of each individual is measured based on their expected present value (Hamada, 2002, p. 152).
- **Intellectual (Cognitive) Allocations Model:** Proposed by Mashkooor and Nasser (2021), this model measures human capital based on intellectual allocations (certification, service, and technical allocations) (Mashkooor, Nasser, 2021, p. 6). The researcher notes that this model is limited to specific allocations and overlooks other elements controlling human capital, creating a gap in measurement.
- **Market-to-Book Value Model:** This model focuses on the difference between the book value and market value of an institution. The assumption is that the market value represents the true value of the institution, and any excess of market value over book value is attributed to human capital.

Cost-Based Models: these models measure human capital based on costs and include:

- **Historical Cost of Human Resources Model:** Developed by Brummet, Flamholtz, and Pyle (1971), this model includes the costs incurred by an institution to acquire human resources, consisting of acquisition costs and learning costs.
- **Replacement Cost of Human Resources Model:** Developed by Likert and Eric (1985), this model refers to the cost of replacing existing human resources with new ones, distinguishing between functional and personal replacement.
- **Opportunity Cost Model:** Similar to the competitive bidding model, this model measures the cost of reallocating human resources to alternative uses.

EVALUATING THE APPLICABILITY OF THESE MODELS IN ACADEMIC INSTITUTIONS

After reviewing the most important models for measuring human capital—descriptive, behavioral, value-based, and cost-based—it is evident that, despite their diversity, there is no universally agreed-upon model among researchers and specialists for measuring human capital and evaluating intellectual assets in economic units. This lack of consensus means that adopting any model will result in gaps in measurement outcomes. The researcher believes that quantitative measurement using non-monetary indicators and focusing on the relative importance of human capital elements in universities may be more effective than monetary measurement. This approach provides useful and reliable information for internal and external stakeholders, reflecting the presence of effective and efficient human capital, which enhances the institution's reputation and competitive advantage. It also highlights opportunities for improvement to elevate this importance to higher levels.

COMPONENTS OF HUMAN CAPITAL IN ACADEMIC INSTITUTIONS:

Researchers have varied in their views regarding the components of human capital. In a study by Makhlof (2016), the elements of human capital were identified as: (competencies, experiences, knowledge, and qualifications) (Makhlof, 2016, p. 18).

Knowledge and qualifications were classified as one of the components of human capital into:

- **Communication competencies:** Represented by listening, speaking, reading, and writing skills.
- **Individual competencies:** Expressing the individual's ability to learn science and self-discipline.
- **Relationship competencies:** Represented by teamwork spirit and management art, with other essential competencies including ease of using information and communication technologies, implicit knowledge, and problem-solving ability (Arnout, 2017, p. 360).

In a study by Abu Tajar and Khater (2020), human capital was found to consist of several elements: (knowledge, skills, abilities, innovation) (Abu Tajar, Khater, 2020, p. 589).

In a study by Abboud (2019), human capital was found to consist of knowledge, competencies, technical ability, and personal traits such as intelligence, commitment, learning ability, including imagination and creativity, willingness to exchange information, teamwork participation, and focus on organizational goals (Abboud, 2019, p. 109).

Additionally, in a study by Najm (2010), the components of human capital were identified as:

- Employees' capabilities, including (strategic leadership for organizational management, employee quality level, learning ability, extent of employee contribution to decision-making).
- Employee creativity: Including creative ability, employee innovation, and the return achieved from employees' smart ideas.
- Employee attitudes: Including alignment with organizational values, employee satisfaction level, turnover rate, and average employee service in the organization (Najm, 2010, p. 145).

Rabah and Louisa (2017) identified some dimensions of human capital as education, experience, knowledge, innovation, functional and technical skills, training, problem-solving ability, dealing with uncertainty, and working within a unified and coordinated team (Rabah, Louisa, 2017, p. 134).

Based on the research objectives, which are to determine the considerations for measuring human capital at Antioch Syrian Private University, it is necessary to identify the components of human capital in academic institutions. Therefore, some scientific literatures were relied upon to compile the components of human capital, and the researcher classified these components and added other elements in a way that suits the study population by studying the university's needs for human resources and the procedures and policies of the Human Resources Directorate and the university's culture as controlling factors for human capital elements, to determine the components of human capital at Antioch Syrian Private University as follows:

Considerations for Measuring Human Capital Represented by the Academic Staff and Employees at Antioch Syrian Private University

1. **Qualifications:** Various information accumulated through education, training, and work, classified as follows: (specialization, academic degree (Master's/PhD), experiences (training courses/academic and professional reputation/scientific production), job level, depth and breadth of knowledge (another specialization/technological knowledge)
2. **Personal Elements:** Ability to innovate, self-motivation to improve and develop work, Passion for Collaboration, mental independence, extent of spread of quality concepts and commitment to performance quality standards when performing required tasks, especially the quality assurance standards required by the Ministry of Higher Education for task performance.
3. **Group Performance Elements:** Represented by flexibility and teamwork, cooperation and belonging, professional efficiency of academic staff, job satisfaction, level of group interaction to succeed in ISO projects.
4. **Organizational Culture:** This study focused on organizational culture elements as controlling factors for human capital elements at the university, including:
 - The pattern adopted by the university for managing human resources by studying the mechanism for recruiting employees and the mechanism for evaluating employees horizontally and vertically.
 - Quality culture: The extent of the university administration's interest in the quality of employee performance and providing good conditions for its improvement, in addition to the extent of applying a quality management system at the university according to international quality standards (ISO), or the quality assurance unit and its effectiveness.
 - Strategic culture for developing and updating human resources: The mechanism by which the university plans to develop work skills and the opportunities available to meet employees' training needs.
 - Work values: This study focused on the extent of the university's interest in spreading work values and activating them among employees at the university related to integrity, transparency, and accountability.

A PROPOSED MODEL FOR MEASURING HUMAN CAPITAL AT ANTIOCH SYRIAN PRIVATE UNIVERSITY

(FIELD STUDY)

STUDY POPULATION:

The study population consists of all elements of the phenomenon under study, which here comprises the human resources at Antioch Syrian Private University, as shown in Table (1), totaling 167 male and female workers. These resources are divided into two categories: the first category includes all academic staff members across the university's faculties, totaling 116 members. The second category includes all administrative staff at the university, totaling 51 male and female workers. A comprehensive census method will be used to study the human resources at Antioch Syrian Private University.

Table No. (1) Formation of the Research Community

Human Resources		Numbers
Academic Staff	Faculty of Engineering- Department of Civil Engineering	19
	Faculty of Engineering -Department of Architecture Engineering	24
	Faculty of Engineering -Department of Computer Engineering	21
	Faculty of Economic and Management Sciences	20
	Faculty of law	11
	Faculty of Pharmacy	17
	University Requirements	4
Total		116
Administrative staff	Office of the Rector and the Secretariat of the University	2
	Directorate of Human Resources	1
	Directorate of Information and Communication Technology	2
	Director of Student Affairs	9
	Directorate of Finance	4
	Examinations Directorate	2
	Directorate of Accreditation and Quality	1
	Directorate of Supplies and Recipients for Building	31
Total		51
Total human resources at the university		167

Source: Prepared by the researcher according to the records of the Directorate of Human Resources at Antioch Syrian Private University.

DESIGNING THE PROPOSED MEASUREMENT MODEL

Table No. (2) Proposed Human Capital Index

Key indicators	Sub-Indices		
	Sub-indicator	Academic Staff	Administrative Staff
Qualifications 24%	Certificate	2%	2%
	Specialization	2%	2%
	Job Level	4%	5%
	Training Courses	4%	5%
	Practical production	4%	-----
	Technological knowledge	4%	5%
	A specialization different from the basic specialization	4%	5%
	Personal Elements 40%	Creative abilities	14%
	Self-motivated to improve and develop work	6%	6%
	Passion for Collaboration	9%	9%
	Mental independence	3%	3%
	The prevalence of quality concepts and adherence to quality standards of performance when performing the required tasks	8%	8%
Group Performance 11%	Academic Staff Competence	4%	-----
	Flexibility and teamwork	2%	3%
	Cooperation and belonging	2%	3%
	Job Satisfaction	3%	5%
Organizational culture 25%	The University's Approved Style of Human Resource Management	4%	4%
	Quality Culture	5%	5%
	Strategic culture for the development and modernization of human resources	7%	7%
	Job Values	9%	9%
Grand Total of Key Indicators		100%	100%

Source: Prepared by the researcher based on the Intellectual Capital Index (IC-INDEX)

STAGES OF MEASURING HUMAN CAPITAL

1. **Stage One:** Identifying the components of human capital in the university, relying on scientific literatures to compile these components, classifying them, and adding other elements suitable for the study population. This led to defining the components of human capital at Antioch Syrian Private University: qualifications, personal elements, collective performance elements, and organizational culture.
2. **Stage Two:** Assigning weighting grades or relative indicators to these components for both academic and administrative staff, then aggregating them into a single composite index for each category. This framework reflects the "holistic" relationship of these components, whose interaction and integration determine the value of human capital. The proposed human capital index in this study is based on the Intellectual Capital Index (IC-INDEX) from Al-Koumi's study (2012). Individual indicators are aggregated into a composite index to illustrate the total value of intellectual capital. Building this model requires defining the institution's strategy, identifying intellectual capital components, assigning weights to these components based on their relative importance, and linking institutional strategy to intellectual capital elements (Al-Koumi, 2012, p. 312).
3. **Stage Three:** Developing a checklist to collect data for the proposed model. This checklist included items measuring the actual presence of human capital in the university, aligned with elements specific to academic and administrative staff. Data were gathered from employment contracts, records, human resource documents, and interviews with quality assurance and HR officials. The checklist was distributed to most university staff, and additional data were collected through personal interviews and institutional records.
4. **Stage Four:** Processing and transforming data into actionable information through the following steps:
 - **Identifying Core Components:** Four core components were identified, with relative weights assigned as follows:
 1. Qualifications: 24%
 2. Personal Elements: 40%
 3. Collective Performance: 11%
 4. Organizational Culture: 25%
 - **Subcomponent Breakdown:** Each component was subdivided into subcomponents based on their relative importance.
 - **Weight Calculation:** Relative weights were assigned to each subcomponent and aggregated to determine the overall human capital value.

DATA COLLECTION TOOLS:

A checklist was developed to gather data, inspired by existing models for measuring human capital, such as knowledge management assessment tools and self-evaluation frameworks for knowledge workers. Data were supplemented by reviewing HR documents, quality systems, and interviews with quality assurance and HR officials. The checklist included four sections:

Section 1: 7 items measuring staff qualifications.

Section 2: 18 items measuring personal elements (with 2 validation items).

Section 3: 16 items measuring academic staff's collective performance and 12 items for administrative staff.

Section 4: 20 items assessing organizational culture.

RESULTS:

1. The factors for measuring human capital at Antioch Syrian Private University have been identified as qualifications, personal elements, elements of group performance, and organizational culture as controlling elements of human capital in the university, according to the table No. (3).

Table No. (3): Results of Measuring Actual Human Capital Compared to the Standard

Key indicators 100%	Sub-Indices					
	Sub-indicator	Academic Staff		Administrative Staff		
		Proposed standard	Actual	Proposed standard	Actual	
Qualifications 24%	Certificate	2%	2%	2%	2%	
	Specialization	2%	2%	2%	2%	
	Job Level	4%	3%	5%	4%	
	Training Courses	4%	3.4%	5%	2.5%	
	Practical production	4%	2.7%	For the academic staff , it was not included in the measurement for the administrative staff		
	Technological knowledge	4%	2.5%	5%	3.2%	
	A specialization different from the basic specialization	4%	2.3%	5%	2%	
	Total Indicators		24%	17.9%	24%	15.7%
	Verification Ratio for Sub-Indicators		74.58%		65.42%	
Personal Elements 40%	Creative abilities	14%	12.41%	14%	12.31%	
	Self-motivated to improve and develop work	6%	5.41 %	6%	5.1%	
	Passion for Collaboration	9%	8.07%	9%	8.06%	
	Mental independence	3%	2.19%	3%	2.05%	
	The prevalence of quality concepts and adherence to quality standards of performance when performing the required tasks	8%	7.98%	8%	7.41	
Total Indicators		40%	36.06 %	40%	34.93	

Verification Ratio for Sub-Indicators		90.15%		87.33%	
Group Performance 11%	Academic Staff Competence	4%	2.75%	For the academic staff , it was not included in the measurement for the administrative staff	
	Flexibility and teamwork	2%	1.06%	3%	1.055%
	Cooperation and belonging	2%	1.3%	3%	1.11%
	Job Satisfaction	3%	1.52%	5%	2.47%
Total Indicators		11%	6.63%	11%	4.64%
Verification Ratio for Sub-Indicators		60.27%		42.18%	
Organizational culture 25%	The University's Approved Style of Human Resource Management	4%	1.14%	4%	2.19%
	Quality Culture	5%	2.96%	5%	2.76%
	Strategic culture for the development and modernization of human resources	7%	1.78%	7%	1.7%
	Job Values	9%	8.67%	9%	8.09%
Total Indicators		25%	14.55%	25%	14.74%
Verification Ratio for Sub-Indicators		58.2%		58.96%	
Grand Total of Key Indicators		100%	75.14%	100%	70.01%

2. The actual human capital at Antioch Syrian Private University reached 75.14% for academic staff members.
3. The actual human capital at Antioch Syrian Private University reached 70.01% for administrative staff.
4. There is efficiency in human resources due to a high qualification index, though technological knowledge and specialization in fields outside core disciplines remain moderately developed.
5. There is a high level in personal attribute indicators related to creative abilities and self-motivation among human resources to improve and develop their work, aligning with quality requirements at the university.
6. There is a decline in group performance at the university due to low job satisfaction regarding wages and incentives, coupled with a lack of teamwork culture, which has negatively impacted collaboration and loyalty. This persists despite a high indicator of collaborative spirit and self-motivation among human resources as part of their personal attributes.
7. Quality culture is moderately prevalent at the university due to the absence of a clear and defined quality management system. Establishing such a system is essential to disseminating quality culture among staff. Currently, the Quality Assurance Unit only focuses on meeting accreditation criteria set by the Ministry of Higher Education.
8. The university lacks a clear human resources management strategy, particularly in: attracting human resources (especially academic staff) and developing a culture of performance evaluation for employees, both horizontally (peer-to-peer) and vertically (hierarchical).
9. There is no strategy for developing and modernizing human resources at the university, which is a key factor in advancing human capital. This has led to a decline in the proportion of actual human capital.
10. Work values are highly prevalent at the university, indicating that the institution is in a healthy and sound state.

SUGGESTIONS AND RECOMMENDATIONS:

Based on the research findings, the following suggestions and recommendations are proposed:

1. We suggest that the university administration adopt a system for measuring human resources, leveraging the experience of this research in assessing human capital.
2. We suggest that the university administration establish a system to activate scientific competencies through incentives for scientific output and expanding knowledge, particularly administrative expertise.
3. We suggest that the university administration implement ISO international standards, specifically ISO 21001 for educational institutions, and obtain certification for its application.
4. We suggest that the university administration conduct a study to develop salary, incentive, and promotion systems based on a clear job hierarchy to improve job satisfaction and employee performance.
5. We suggest that the university administration create systems to develop and modernize human resources to enhance their competencies and practical expertise.
6. We suggest that the university administration design a performance evaluation system that incorporates horizontal (peer-to-peer) and vertical (hierarchical) evaluations in both directions.
7. We suggest that the university administration adopt a clear recruitment strategy for both academic staff and administrative personnel.
8. Adopt the proposed research model and refine it according to the needs and specificities of universities.
9. It is essential to conduct further studies on measuring human capital, given the importance of the data derived from such measurements for developing plans to enhance human resources and improve their performance.
10. Business organizations and service institutions must prioritize the concept of human capital and focus on measuring it to advance their operations and gain a competitive edge.
11. Educational, service, and even production institutions should disclose their human capital as part of financial investments in final financial statements, through supplementary financial statements, or by including it in board reports as an interim measure until an integrated system for human resources accounting is implemented in economic units.

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