Human Resource Accounting Toward Human Welfare

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Abstract

Objective: The debate on human resource accounting is still ongoing, namely in particular the accounting treatment on the recognition of all human resource expenditures, whether recognized as an expense or an asset. As the company’s driving force, humans have an important role but are recognized as an expense in the financial statements. Therefore, this study aimed to develop an alternative model in human resource accounting.

Design: This study was structured to build a human resource accounting model by synthesizing the biological asset concept in recognition and measurement. It also used Homo religious analysis to clarify the nature and treatment of human resource accounting.

Finding: The concept of human resource accounting was compiled through the growth, production, degeneration, and procreation cycle. Human resource accounting based on homo economicus is far from human values. It only touches on material but not other aspects of human welfare. Additionally, the value was added by synthesizing homo religious as a model for developing human resource accounting. This value complements the position of human resource accounting to cover the aporetic problems between humans, accounting, and God.

Theoretical and practical implications: First, human resource accounting is structured based on its characteristics, recognition, and measurement through several stages. This is expected to explain the position of human resources as a burden or an asset. Furthermore, the structuring should have a materialistic economic motive and must be based on God’s law in achieving human welfare. Second, it is important to treat human resources by aligning the soul, nature, and God as a manifestation of added

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value. This aims to balance human resources and the company and be reported in financial statements narratively.

**Originality:** This study referred to the post-secular religious currents to contribute to critical and interdisciplinary awareness in accounting. It aimed to complete human resource accounting development by tracing humans as homo religious.

**Keywords:** Human resource accounting, biological assets, welfare, homo religious.

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### 1. Introduction

Human Resource Accounting (HRA) comes from a growing topic currently under debate. Rahaman et al., (2013) stated that HRA is an information system that identifies, measures, captures, tracks, and analyzes the potential of a company's human resources. The system also communicates the resulting information to company stakeholders. Human resources are a vital source of value creation and a determinant in ensuring growth and sustainable organizational development (Sürdü et al., 2020). Conventional human resource accounting applies human capital formation expenditures as an expense to period income because it does not create physical assets. Issues related to human resource accounting are crucial. One important issue is that the company provides several allocations of financial resources to employees with a specific purpose. Human resources are seen mainly as an integral part of the company's value creation process (Holland, 2006; Pike et al., 2000), as well as creating and maintaining competitive advantage (Holland, 2006). There is no different opinion that humans are one of an entity’s most essential components (Adejuwon et al., 2020). However, human resource accounting could provide information for investment decision purposes. Abubakar (2006) considered this aspect a measurement tool to communicate the cost and value of the organization's employees. Appropriate human resource information makes the published financial statements more meaningful in predicting the company's future performance (Jawahar Lal, 2009). According to Sarkar et al., (2016), every aspect of a company’s activities is determined by human resource competence, motivation, and general effectiveness. Organizations invest significantly in their best human resources that generate competitive advantage and become significant market players.

The theories and concepts underlying human resource accounting have received much academic attention and are derived from much-developed literature. The current accounting system regards workers as resources owned and used as inputs, expenditure factors, or production costs (Rahaman et al., 2013). This conventional accounting
A system does not recognize human resources as physical or financial assets. Enofe et al. (2013) found that the popular HRA concept is not generally accepted, and many organizations are still trying to understand it conceptually. Furthermore, Khan (2021) suggested that HRA recognition is still lagging because no accounting standards guide the dimensions of its considerations in financial statements. The difficulty in measuring the value of human resources is one reason standards have not been issued regulating the treatment of human resource accounting. Various studies have examined alternative measurements of human resources. However, there is still no agreement on the criteria, recognition, and objective measurement of human resources.

The development of the human resource accounting idea experienced a shift in meaning within the company. The idea was presented by several figures, including William Pyle, Eric Flamholtz, and R. Lee Brummet. These figures together stated that human resources have become part of the intellectual capital domain and should be valued as an intangible asset (Brummet et al., 1969b, 1969a). Each of them has proposed that the value of human resources should be measured and reported independently or as part of intellectual capital or intangible assets. According to Sveiby (1997), human capital entails educating and training the staff that makes the main contribution to income. De Pablos (2004) stated that human capital represents an organization's knowledge indicated by the value of human resources that could improve entity performance. Therefore, less relevant concepts and costs incurred for each human resource asset should be capitalized because they generate benefits measurable in monetary terms (Leinonen, 2022; Sharma et al., 2022).

Conventional accounting financial statements have no information on the value of a company's human resources but only show the salary, training, and education costs. All costs incurred for HR are assumed operational only, including revenue expenditure and expense approach, but not as capital expenditures. Therefore, this study aimed to straighten out the debate on human resource accounting regarding assets or costs by building the characteristics, recognition, and measurement concepts. The interesting fact about the treatment in human resource accounting is the marginalization of human religiosity. The secularism growing with human modernity emphasizes humans' bodily or physical dimensions. Furthermore, the empiricism that becomes an ideological understanding makes the spiritual dimension untouchable, verified, appreciated, and even rejected. In modern times, humans are only seen as entities consisting of body and soul. The domination of homo economicus is the human face dominated by the economic paradigm. According to Chardin's theory of evolution (1964), all forms in this universe have inner and outer
sides underlying everything and working harmoniously. Therefore, this study sought to form a perspective of the human resource accounting model in providing information to management and users. It also intended to examine how humans understand their existence and external reality that comes from the natural desire to realize something absolute outside themselves.

2. Method
This study used a synthesis method with three stages. The first stage synthesized the characteristics, recognition, measurement, and reporting of the treatment of biological assets comprising the growth, production, degeneration, and procreation phases. The second stage synthesized the treatment of human resources through homo religious directly related to humans’ vertical and horizontal relationships. The third stage formed a model from the synthesis of the previous stage.

3. Results and Discussion
Characteristics of Human Resources
The position of human resources as a burden or asset is debated in accounting academics. Semantically, using “human capital” to substitute human resources implies being exploited, while capital denotes investing (Cafferkey et al., 2021). Human capital also emphasizes qualitative differences in individuals concerning knowledge and skills, regardless of how they are acquired (Winterton, 2012). It is mainly judged by the competence possessed by the individual. Verguwen & Alem (2005) stated that the value of all employees in an organization constitutes rewards regarding their utilization.

Galli B. J (2019) described the importance of human resources in a globally competitive environment. One crucial element that assists in the production process in almost all business organizations is human resources. According to Allen (2010), employees contribute value rather than costs to increase mutual profits. Česynienė et al., (2013) suggested that in employee recruitment and workforce security, induction, appraisal, training, and significant growth, human resources could perform functions such as strategic planning, administration, teamwork skills development, and organizational projection, and change management. Organizational human resources reflect the training, expertise, judgment, intelligence, relationships, and insights of a company’s managers and workers (Barney J, 1991).
Unlike monetary and fixed capital, human capital is not exhausted by its use until it is no longer helpful (Baker et al., 1997). According to the International Accounting Standards Board (IASB), human resources should be treated as assets as long as they provide future economic benefits to an enterprise. Kucharcikova (2011) stated that new economic growth theories characterize human capital as individual innate and acquired skills, knowledge, and experience. Under the managerial view, human capital is a resource or business asset as part of the firms’ market value. From the macroeconomic perspective, human capital is a production factor and a source of economic growth (Kucharcikova, 2011). Additionally, Marimuthu (2009) stated that human capital refers to processes related to training, education, and other professional initiatives to increase an employees’ knowledge, skills, abilities, values, and social assets. This results in job satisfaction and employee performance. Brinker (2000) provided some essential measurable human capital characteristics, including training and learning programs, credentials, experience, competence, recruitment, mentoring, individual potential, and personality.

The description becomes the correct argument in assessing a company’s human or worker characteristics as a crucial capital in increasing competitive value. Human assets are entities that undergo management, transformation, and production processes to produce products or services. Including human resources as an asset should influence the users’ economic decisions or trigger re-evaluating past decisions. Since a human resource asset provides future economic benefits to the company, the asset’s value must be established with reliability before its inclusion in the financial statements. In most cases, human resource assets are significant in their total value. Stewart (1997) showed that financial analysts and investors consider human resource information relevant and a key component in their decision-making processes.

Recognition

In analyzing human resources' characteristics as assets, this study aimed to transform human recognition by synthesizing biological assets in IAS 41. Biological assets imply “the management of an agricultural activity by an entity of the biological transformation and harvest of biological assets for sale or conversion into agricultural produce or additional biological assets”. Paragraph 10 of IAS 41 states that an entity recognizes biological assets or agricultural products when the following conditions exist. First, the entity controls a biological asset due to past events. Second, the future economic benefits associated with the biological asset would probably flow to
the entity. Third, the fair value or cost of biological assets is measurable reliably.

The biological assets’ unique characteristics lie in their transformation or biological change for consumption or further management by the entity. The recognition of a company's human resources as assets could be controlled through employment contracts. The contact forms the basis of rights and obligations for companies and workers. This position describes the company's ownership of its employees. Furthermore, human resources are recruited by selection to occupy positions that require physical conditions and abilities according to the required criteria. The recruitment, training, and human development processes provide value for each individual and contribute to the flow of cash and its equivalents to the company. Furthermore, the cost could be measured reliably. Many studies have been conducted to produce human resource measurement models. Falmholtz Eric G (1971) produced a method of measuring human resources using a cost-based model. The method was also based on economic value divided into monetary and non-monetary value-based approaches. Additionally, Fulmer & Ployhart (2014) classified knowledge-based models that measure human resources into assets.

Biological assets undergo a biological transformation phase with four stages. These stages are quality and quantity growth, degeneration, creating new livestock or production, and procreation. This biological transformation phase creates an event known as accretion, where an income is recognized along with biological asset growth. Accretion assumes that biological assets are usually sold at any time and at various growth levels at certain market prices. This concept could ease agricultural business entities when their biological assets are sold forcefully because they are unproductive or sick. In this case, the assets are sold without harming the entity. Using this assumption, human capital is closely related to accretion events in which human resources transform from growth, production, degeneration, and procreation.

**Figure 1. Human resource accounting cycle**
In the growth phase, human resources start from the recruitment process with strict selection criteria according to company needs. Every strategic approach to human resource management increases the employees’ ability and motivation. This growth or learning stage ensures that employees improve their skills, attitudes, knowledge, confidence, and commitment to their jobs through training and development programs. According to Rosak & Boriowski (2007) workers are the most valuable element because they are every organization’s resources that pay attention to the tasks performed. Organizations investing in their employees’ capabilities and motivation impact human resources that could provide benefits and value.

In the productive phase, human resources reach maturity by producing in line with the management’s target capacity. Examples of corporate plan formulations directed at strategic goals are Key Performance Indicators (KPI), work standards, and Specific, Measurable, Achievable, Realistic, and Time-oriented (SMART) activities that measure employee performance. The process takes place top-down and is determined by the company's management.

Peters (2008) stated that degeneration is a change in physical and chemical conditions in cells, tissues, or organs that reduces efficiency. It could be caused by aging and disease characterized by the loss of tissue function. The process changes the anatomical function of the body's organs, starting from the cellular level to the function of the body's movement. Similarly, human resources naturally experience a decrease in intensity and productivity after undergoing a growth phase and through productive age. This phase is anticipated by training employees, planning for their future, and preparing for the procreation phase of regeneration by returning to the first cycle of recruitment stages.

Measurement

The study conducted a discussion related to measurement. In presenting financial statements, it is necessary to measure the value of the human resource assets appropriately. The asset value should be presented fairly in the company's or business entity’s financial statements. This is accomplished by measuring human resource data, the recruitment, maintenance costs, and the returns achieved. The approaches used in the measurement process include:

A. Cost-Based Approach (Cost-Based Model)

1. Historical Cost

The historical cost was initiated by Brummet et al., (1968). The two stages in this approach are capitalization and amortization of costs. All costs are subject to capitalization, such as recruitment of new workers,
selection, payroll, and education or training. The same applies to amortized costs over the useful life of human resources by recognizing losses due to searching for them. This method recognizes losses when seeking human resources. It also increases the value of assets due to additional costs for increasing the potential of human resources. However, the value of human resources is adjusted to their historical value. This indicates the method is subjective in appreciating or amortizing and has no standard rules about cost limits.

2. Replacement Cost

Replacement cost is an approach method based on the cost of replacing a company’s human resources. It consists of the total cost of recruiting, selecting, paying, education and training, placing, and developing new human resources. Development costs equalize the potential and skills of previous human resources to achieve ability and experience. However, the company may have human resources whose value exceeds replacement costs. Finding a commensurate and subjective substitute in determining replacement costs becomes challenging. The method determines the economic value of human resources.

3. Standard Cost

Standard cost proposed by David Watson (1980) is an analytical system that controls and makes a policy concerning human resources to suit the career path and hierarchy of their competencies. As a limitation, this method focuses on inputs such as training and development without balancing other factors such as salaries, rewards, and health insurance. However, standard recruitment, training, and human resource capacity development costs are set according to the employee level.

B. The approach is based on the Economic value model

Economic measurement has two approaches:

1. Monetary Value-Based Approaches

Monetary value-based approaches measure human value equivalent to a unit of currency value consisting of:

a. Opportunity Cost

The opportunity cost was proposed by Hekimian & Jones (1967). These costs are determined by the bargaining process within the company. The competition between individuals and skills becomes a benchmark for the value of human resources, known as an alternative use of employees. This method is limited to those offering the best competencies and reduces the morale and productivity of human
resources. However, it maximizes the performance and allocation of human resources. It is also a quantitative basis for planning, evaluating, and developing human resources as the main asset.

b. Adjusted Discounted Future Wages

This method was proposed by Hermanson (1964) and is often referred to as the Hermanson model. It proposes an adjusted compensation value reflecting human value to the company. In this method, it is necessary to adjust the compensation value with the efficiency factor. However, the truth of this ratio lies in the difference in the achievement probability.

c. Present Value Approach

The present value approach was proposed by Lev & Schwartz (1971) and dubbed the Lev and Schwartz model or the present value approach. This method assesses human resources according to their present value. The resources are classified based on specific groups adjusted according to age and skills, the average annual income, and age range. In the next stage, companies calculate the total income from their human resources until retirement. The value of human assets is obtained by discounting the cost of capital. This method ignores other considerations for the company, such as seniority, competitive capacity, ability, experience, career path changes, and early retirement. However, it is consistent with the time value and expected income of human resources because it calculates their benefits until retiring.

d. Reward Valuation Model

The reward valuation model was proposed by Falmholtz Eric G (1971). This method is a form of developing the discounted value of future wages model (Lev & Schwartz, 1971). The model considers career advancement and human resources' role in creating the company's effectiveness. Furthermore, the method assumes no direct relationship between the costs incurred and the company's value. The limitation is the high subjectivity and visibility, such as in the employee contribution variable. However, the model provides another alternative calculation with the possibility of career advancement.

e. Net Benefit Model

In this method proposed by Morse (1973), the value of human resources and the net benefits obtained by the company are equal. The first stage of this calculation is measuring the gross value of services to be provided in the future with a collective capacity. The value obtained is reduced by the direct and indirect investment costs of human resources. The difference in the current value is the real
value of the company's human resources benefits. The present value of the net benefits is obtained using the discount rate formula for the cost of capital. However, this method has no clear indicator of the gross value of the services provided, such as variables of working hours and productivity of output on services or goods. The advantage is that the value generated is the real value from the company's human resources benefits.

f. Lev & Schwartz (1971) proposed a valuation method using the present value of future earnings. Although this is objective because it proposes using actual wages and salaries paid, there is subjectivity in the calculations depending on the discount rate used. The model's weakness is the use of profit to determine the human resource asset value.

The method used to value assets is related to each company's specifications of the nature and type of business. Appropriate measurement is needed to exercise tactical control by optimizing the use of resources in generating corporate wealth.

This second part discusses human resources transformation from homo economicus to homo religious.

Industrial Community

Religion that used to be a social institution has now lost its scientific influence on human life and has become the basis of forming a new existential situation. It previously played a monopoly role in human life but now has become a paradox limiting science development. These consequences bring new conditions to ethics, politics, society, and human life. Secularization removes religion from its monopoly in various fields of human life through modern science. This science robs the nature of God's intervention and destroys the solid metaphysical foundation of absolute values. As the subjects and object of their role in fulfilling the company's goals, human resources cannot be separated from this homo economicus philosophy. In Smith's theory, happiness results from having an object that satisfies a human desire and from how one thinks that the object would fulfill that desire. Bentham's theory explains that happiness, pleasure, and utility are synonyms. All actions, including those by the government, should be judged according to the pleasure produced (Mckay F, 2016). This condition of fulfilling human desires spurred modernity and created homo economicus. (Lushch-Purii, 2021) stated that humans are hedonic actors seeking to maximize pleasure and utility. They are selfish but also rational because they use reason to find the best way to achieve goals. Money becomes a means of quantitative evaluation from the qualitative experience of pleasure, while homo economicus is a philosophy of pursuing human happiness.
The development of the human resource concept as a burden or asset has serious gaps for workers. In the employment context, welfare implies the well-being used to indicate the employees’ overall affective experience and functioning in the workplace (Lin et al., 2020). The World Health Organization describes health as complete physical, mental and social well-being. (Van de Voorde et al., 2011) showed multidimensional traits of well-being comprising psychological (happiness), physical (health), and social (relationships) dimensions. Human resources and work studies focus mainly on the psychological dimensions of well-being, including job satisfaction, engagement, and affective commitment. Capacity building increases human resource expertise and capacity. Increasing motivation, such as financial incentives, provides leverage to reward desired role behavior or punish behavior not aligned with strategy. Human consciousness has ignored human nature that requires physical and spiritual health.

Homo Economicus to Homo Religiosus

Humans as homo economicus act consistently, rationally, and selfishly narrowly and pursue goals determined subjectively and optimally. Secularization reorients values towards the world and brings humans closer to the sacred by deifying them and humanizing God. Conscious, the conception of human resources with the homo economicus philosophy becomes divine humanization, meaning that a person accepts the autonomy to choose and regulate values. An error that realizes happiness does not implies that humans replace God. It realizes that at some point, material happiness finds emptiness in human beings.

McKernan & Kosmala (2007) stated that the post-secular view is based on the idea that accounting and religion operate in separate environments. They operate in a dichotomy world, where reason, myth, and faith are no longer credible. According to McPhail et al., (2005) accounting studies are becoming increasingly critical of a sacred-secular separation and want to proceed in their engagement with religion. Despite expanding interdisciplinary studies on accounting, little analysis has attempted to unify accounting and religion. The current conception of human resource accounting needs a touch of religiosity and be concerned with rational aspects. Therefore, this study aimed to present homo religious or humans subject to God’s law to balance between spiritual and physical, worldly and hereafter, individual and social, as well as workers and leaders in their lives.

Homo religious is a deep feeling of sacredness that leads to God's awareness. According to Vasile (2013), characteristics of the human pattern include ritual, faithful thoroughness, eloquence, and clear but not indoctrinating others. Eliade (1995) stated that the religious
experience of every human being is not homogeneous. In this case, profane is intertwined with religion in various proportions. Eliade showed that for religious humans, space is not homogeneous, but cracks, fissures, and some parts of that space are qualitatively different from others. There is a sacred strong, significant space, while other spaces are not sanctified, lack structure and coherence, and are formless. This lack of spatial homogeneity is reflected in the conflict between sacred space and only one real, while the rest is informal space (Eliade, 1995).

**Figure 2. The concept of religiosity value-added human capital**

![Diagram showing the concept of religiosity value-added human capital]

The soul is the part of the mind with the power to direct the behavior of human life. It is a psychological and also spiritual organ. The soul consists of the mind, conscience (heart), and spirit (life). Human activities are often based on subconscious impulses that urge people to act. Conversely, human consciousness economicus is weak and powerless to resist, eventually becoming a slave that participates with the will, impulse, and direction of the human mind. The human soul with the concept of homo economicus is centered on self-fulfillment to achieve happiness, often translated into economic added value. This added value fills a gap in human thirst, though a big void still exists. Humans are self-heterogeneity reflected in the difference between emotion, rational, and taste in profane and rational life, but experiences dryness of soul. Religious stories do not qualify for rational acceptance, but the story of human religion is accepted beyond reason and reaches the affective realm. For instance, miracles are considered known as man-made, but irrationally many people believe in miracles.

Eliade (1995) considered a mechanism for identifying fixed points in religious behavior and centers of balance for humans. This rift in space shows that humans, through rational reason, should understand the existence of material and non-material forms. Humans have a holy spirit that needs to be recognized to unlock the immaterial aspects and balance the physical, soul, mind, and nature. Furthermore, human resources need a touch of the inner side that maintains purity and truth by presenting God. The divine values are a window to the human heart to ensure humans are loving, wise, just, honest, sincere, optimistic, noble, and caring. This potential directs humans to behave in a superior, productive, and valuable manner. The soul elements...
interact, communicate, negotiate, and compromise. They fight to convey their mission and interests according to their respective roles.

It is natural to seek fulfillment of human happiness based on economic value added and the soul. Human resources live and coexist with nature and its habitat. They interact with components of the physical environment, such as animals, plants, or components of soil, water, rocks, and others. Moreover, humans interact with each other or their social environment and develop values and norms to regulate these interactions. When humans were unfamiliar with technology, their relations with other environmental components were harmonious. They were few and did not excessively take natural resources, minimizing significant damage. However, technological development and increased human needs have made humans more exploitative of natural resources. This has resulted in environmental changes through water, air, and land pollution. The damage negatively impacts humans through diseases and natural disasters.

The synthesis of human resources through the elements described in this study presents value-added religiosity with economic and spiritual aspects needed by humans. These two aspects provide complete human welfare by producing economic value combined with the religiosity of the soul, nature, and God. Moreover, harmonizing economic elements, soul awareness, and nature included in God’s values could be narrated through additional reports. To provide added value, humans and companies should lead good, healthy, and normal behavior according to community agreement. This spiritual cavity should be connected and cared for to help companies and human resources see how discovering and disclosing sacred space brings added value to religiosity.

Conclusion
This study conceptualized human resource accounting by synthesizing biological assets in ISA 41. The synthesis assessed the growth, production, degeneration, and procreation cycle. The study also examined a company’s human characteristics, recognition, and measurement as important capital in increasingly competitive corporate value. Human assets are a company’s entities that undergo management, transformation, and production processes to produce products or services. The relevance of recognition as an asset affects the users’ economic decisions. It also causes business entities to re-evaluate past decisions and provide future economic benefits to the company. The concepts of human resources being developed are still logocentrism of materialism and monetary as an indicator of valuation. The presence of a human resource dimension design with material and
non-material awareness through religiosity value-added human capital could provide mental and spiritual balance for human resources.

Applying the ISA 41 synthesis to forming human resource accounting was limited to characteristics, recognition, and measurement. Further studies could develop measurement methods and presentations tailored to each company's specific characteristics. Regarding fulfilling human resource welfare through religiosity value-added human capital, the studies could develop this concept to the qualitative and quantitative measurement stage, presentation, and reporting.

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