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Development of Technology Management Model for Electric Vehicle Battery Industry in China

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Abstract:The study "Development of Development of technology management model for electric vehicle battery industry in China" has one main objective is to development technology management model for electric vehicle battery industry in China, and three specific objectives: 1) To study of elements of technology management for electric vehicle battery industry in China. 2) To evaluate of elements of technology management for electric vehicle battery industry in China. 3) To create and evaluate of technology management model for electric vehicle battery industry in China.

1) The first objective uses interviews, selected 10 representatives from electric vehicle battery industry manufacturers interviewed for it. And design of interview forms based on prior surveys, and 10 representatives consultations to understand the foundational elements and strategies of technology management within the industry. The frequency for elements like technology assessment, pre-selection framework, technology/market scanning, and information management indicate a robust foundation in the identification phase of technology management within the industry. Points such as technology forecasting and benchmarking are critical in the selection phase, indicating a proactive approach to future technologies and competitive positioning.

2) The second objective involves developing these elements into a structured technology management model using the interview method for 18 experts, ensuring the model is grounded in expert consensus and industry relevance. The evaluation reveals strong consensus on the importance of acquisition and exploitation phases, with project management, technology insertion, and customer-supplier network scoring high median values. This suggests effective strategies in incorporating new technologies into operations and leveraging them for market advantage. The emphasis on internal R&D and licensing/joint ventures highlights the industry's reliance on both internal innovation and external collaborations.

The third objective assesses the practical effectiveness of the model by gathering feedback from a select group of 6 experts, applying evaluation principles to ensure the model's validity and utility in real-world scenarios. The protection phase, focusing on identifying options, establishing strategies, and monitoring effectiveness, underscores the industry's commitment to sustaining its competitive edge through continuous improvement and strategic foresight. The consistent evaluation Opinions across the board, reflects a comprehensive and well-balanced approach to technology management in the industry, validating the EVBI model's applicability. Technical management consists of 5 parts:technology Identification,technology Selection,technology Acquisition,technology Exploitation,technology Protection;There are a total of 20 small dots.The evaluation results have 5 parts, and it was found that each point is above Mnd3.5 and below IQR1.5.The established model has suitability in every aspect.

Keywords*:* Technology management,model,electric vehicle battery ,Development

1. Introduction

The importance of electric vehicles in China is evident in many aspects, involving economic, environmental, technological innovation and other aspects: Climate change mitigation: Electric vehicles are a key part of climate change mitigation because they use electricity instead of traditional fuel, thus reducing greenhouse gas emissions.

China is one of the world's largest emitter of greenhouse gases, and promoting the development of electric vehicles will help achieve global climate goals.

China has made significant progress in battery technology and electric vehicle management systems. The following are some important aspects of China's battery technology and management development: Battery Technology Innovation: China has conducted a lot of research and development and innovation in key battery technologies such as lithium-ion batteries. Many Chinese companies are committed to improving the energy density, safety and life of batteries to improve the range and service life of electric vehicles. Complete industrial chain: China has established a huge battery industry chain, covering the entire value chain from raw material procurement to battery manufacturing and recycling. This helps ensure a stable supply of batteries and improves production efficiency. Scale of battery production: China is one of the world's largest battery producers. A number of local and international battery manufacturers have production bases in China to produce batteries for electric vehicles, energy storage systems and other electronic devices.

Government support and policy orientation: The Chinese government encourages the development of battery technology through a series of policies and incentives. This includes financial subsidies, industrial guidance funds, the formulation of technical standards and the construction of supporting charging infrastructure. Lithium battery industry chain: China has made progress in different links of the lithium battery industry chain, including mineral resources development, battery material preparation, battery cell production and recycling, etc. Intelligent management system: Intelligent management system for electric vehicles has also been developed. This includes improvements to the battery management system (BMS) to ensure battery safety, performance, and life. Energy storage and reuse: Battery technology is not only used in electric vehicles, but also playing an increasingly important role in energy storage systems.

This includes energy storage for both solar and wind power stations (Huang, Y.& Zhang, C.2018). Challenges and opportunities of electric vehicle battery recycling in China (Liu,J.&Liu,C.2020,P172-180).Overview of electric vehicle batteries recycling in China(Wang, L.& Zheng, X.&, Li, Y.& Huang,Z.2018,P254).

The technology management model for China's electric vehicle battery industry is rapidly evolving, including progress in and innovation, industrial chain cooperation, standard setting, quality control and environmental sustainability. Within the industry to strengthen innovation cooperation, actively participate in the formulation of standards, pay attention to quality control and environmental protection, at the same time, international cooperation is gradually deepened, laying a solid foundation for the improvement of electric vehicle battery technology and the healthy development of the industry. For electric vehicle battery technology in our country, the rapid development of science and technology is to promote our power battery technology research and development, commercial speed, in the process, reasonable evaluation of the current electric car and electric car battery technology management model of development effect, and in the future for a period of time for technical management model of prediction and estimation, the electric car industry in China and the development of electric car industry technology management model has important research value.

2. Objectives

2.1 Major objective: To development technology management model for electric vehicle battery industry in China.
2.2 Specific objectives
2.2.1 To study of elements of technology management for electric vehicle battery industry in China
2.2.2 To evaluate of elements of technology management for electric vehicle battery industry in China.
2.2.3. To create and evaluate of technology management model for electric vehicle battery industry in China

3. Methods

3.1 To study the elements of technology management model for electric vehicle battery industry in China.
3.1.1 Defining the population and sample
Population and sample for interviewing opinions about the elements Involved with of technology management model for electric vehicle battery industry in China, as representatives of electric vehicle industry and

representatives of electric vehicle battery industry by semi-structured interviews (Semi-structured Interview) has details as follows:

The selection representatives of 10 electric vehicle industry by selecting a purposive sampling group.

3.1.2 Research Instruments

The research tool used in this step was an interview about the technology management model for electric vehicle battery industry in China, using structured open-ended questions that allowed experts to express their opinions on every aspect. Facts Important details important and interesting in depth and breadth in the issue that needs to be studied, there are steps in creation as follows:

3.1.2.1. The researcher proceeded to create an opinion interview form. The information obtained from the study and analysis of related basic data was used to create an interview framework related to the elements of the technology management model for electric vehicle battery industry in China to receive opinions. and additional suggestions divided into 2 parts:

Part 1: Expert status

Part 2: Guidelines for interviewing expert opinions

3.1.2.2. Take an interview form with the advisor's opinions on guidelines for developing technology management models for the electric vehicle battery industry in China that were created present to the advisor for review and improvement according to recommendations.

3.1.2.3. Bring the interview form have 3 experts check each item for content validity and appropriateness of language. as well as complete clarity completeness and coverage of questions then use the suggestions obtained to improve according to the recommendations before using them for the actual interview.

3.1.3 Data collection

The researcher sent an interview form to the opinions of the sample group, research proposal, the research concept framework, and interview documents for the opinions of the sample group were given to the sample group in advance, and contact to request an interview appointment along with taking notes and recording audio.

3.1.3.1 Data analysis and statistics used in data analysis

The researcher took the data from the interviews and analyzed the opinions of sample group, by classifying the types of data according to content consistency compared with the principles, concepts, and theories related to the issues the researcher interviewed, and then considering the suitability and consistency of the data, to get Information about the components of technology management model for electric vehicle battery industry in China.

3.2 To evaluate of elements of the technology management model for electric vehicle battery industry in China.

3.2.1 Defining the population and sample group

Population and sample group for interviewing opinions regarding the evaluate of components as experts, methods for selecting experts with specific criteria to be considered, with details as follows:

3.2.1.1. The selection 6 experts from university related to electric vehicles by selecting a purposive sampling group

3.2.1.2. The selection 6 experts from government agencies related to electric vehicles by selecting a purposive sampling group

3.2.1.3 The selection 6 experts from Sales representative related to electric vehicles by selecting a purposive sampling group.

3.2.2 Research Instruments

The tools used in this research phase were to evaluate the components and create a technology management model for the electric vehicle battery industry in China, allowing experts to express their opinions on every aspect to obtain important and interesting facts and details. In depth and breadth in the issues you want to study, the steps are as follows.

3.2.2.1. Researcher Create a component evaluation form.

3.2.2.2. The researcher presented the created evaluation form to the advisor to check the appropriateness of the language, as well as the clarity, completeness, and comprehensiveness of the questions, and then used the suggestions to improve them according to the recommendations before actually using them.

3.2.2.3. The researcher took the component evaluation form to 3 experts to check for the quality of the tool.

3.2.3 Data collection

Use the information from step 1 to define the concept for defining elements and creating a model. And evaluate elements and creating a model.

Data analysis and statistics used in data analysis

3.2.3.1 Classify data types.

3.2.3.2 Look at the consistency of the content.

3.2.3.3 Analyze the results from the obtained statistics. and use the analysis results to create components.

3.2.3.4 Find the median.

3.2.3.5 Find the interquartile range.

3.3 To create and evaluate the technology management model for electric vehicle battery industry in China.

3.3.1 Defining the population and sample group

Population and sample group for interviewing opinions regarding the evaluate of model as experts, methods for selecting experts with specific criteria to be considered, with details as follows:

3.3.1.1 The selection 5 experts from university related to electric vehicles by selecting a purposive sampling group

3.3.1.2 The selection 9 representatives of electric vehicle battery industry by selecting a purposive sampling group.

3.3.2 Research Instruments

The tools used in this research phase were to evaluate the technology management model for the electric vehicle battery industry in China, allowing experts to express their opinions on every aspect to obtain important and interesting facts and details. In depth and breadth in the issues you want to study, the steps are as follows.

3.3.2.1 Researcher create a model evaluation form.

3.3.2.2 The researcher presented the created model evaluation form to the advisor to check the appropriateness of the language, as well as the clarity, completeness, and comprehensiveness of the questions, and then used the suggestions to improve them according to the recommendations before actually using them.

3.3.2.3 The researcher took the model evaluation form to 3 experts to check for the quality of the tool.

3.3.3 Data collection

Use the model created from step 2 to complete technology management model evaluate.

Data analysis and statistics used in data analysis

3.3.3.1 Analyze the results from statistics to evaluate the complete of the mod

3.3.3.2 Find the frequency.

3.3.3.3 Find the percentage.

4. Results

4.1 Results of study elements of technology management model for electric vehicle battery

Table 4.1 Data analysis of all elements of technology management model for electric vehicle battery industry in China

Elements		Items	Freq	%
Identification	technology assessment	5	9	90.00
	Pre-selection framework	5	8	80.00
	Technology /market scanning	5	8	80.00
	Information management	5	9	90.00
Selection	Technology forecasting	5	8	80.00
	Benchmarking	5	8	80.00
	Decision criteria&process	5	8	80.00
	Monitoring/improvement	5	8	80.00
Acquisition	Internal R&D	5	9	90.00
	Licensing$joint ventures	5	9	90.00

	Organisational change	5	8	80.00
	Project management	5	9	90.00
	Technology insertion	5	8	80.00
Exploitation	Customer-supplier network	5	9	90.00
	Incremental development	5	8	80.00
	Product management	5	8	80.00
	Complementary assets	5	9	90.00
Protection	Identify options	5	8	80.00
	Establish strategy	5	9	90.00
	Monitor effectiveness	5	8	80.00

The study on the development of a technology management model for the electric vehicle battery industry in China yielded comprehensive insights across several key areas. In the identification phase, the study emphasized the importance of incorporating advanced methods for assessing technologies, both domestically and internationally, and developing a pre-selection framework to identify promising technologies. It highlighted the need for enhanced mechanisms to scan emerging technologies and market trends, alongside strengthening the management and analysis of technology-related information. For technology forecasting, the use of predictive tools to anticipate technology trends and their industry impact was noted as crucial.

For technology assessment, Strengthening technological R & D capacity and strengthen quality management, Perfect cost management, Strengthen safety management frequency are the highest and recognized by 90% experts,It needs important equipment and infrastructure to strengthening technological R &D capacity and strengthen quality management, Perfect cost management, Strengthen safety management. Strengthen the management of production process is the lowest, and 80% of experts mentioned it.

For Pre-selection framework, establishing a Technology Management Process frequency are the highest and recognized by 90% experts, It needs important equipment and infrastructure to Establishing a Technology Management Process, Then, Development of a technology management policy and Establishing a Technology Management Organization is intermediate communication level, and 80% of experts mentioned it. Establish a technical management system and Establishment of a technology management information system is the lowest, and 70% of experts mentioned it.

For technology /market scanning, keep abreast of industry trends and Tracking competitors frequency are the highest and recognized by 90% experts, It needs important equipment and infrastructure to Keep abreast of industry trends and Tracking competitor, Then, Research Market Demand and Focus on policies and regulations is intermediate communication level, and 80% of experts mentioned it. Find a Partner is the lowest, and 70% of experts mentioned it.

For Pre-selection framework, Regular collection of information and analysis of information data and Information sharing and communication and Technology secrecy management frequency are the highest and recognized by 90% experts, it needs important equipment and infrastructure to Regular collection of information and analysis of information data and Information sharing and communication and Technology secrecy management. Establishment of information management systems is the lowest, and 70% of experts mentioned it.

For Benchmarking, Comparison and benchmarking and Conduct Technical Management Assessments and Benchmarking technology management are the highest and recognized by 90% experts, It needs important equipment and infrastructure to Comparison and benchmarking and Conduct Technical Management Assessments and Benchmarking technology management. Develop an improvement plan and Regular monitoring and evaluation is the lowest, and 70% of experts mentioned it.

For decision criteria & process, Determining Decision criteria and data to support decision making frequency are the highest and recognized by 90% experts, it needs important equipment and infrastructure to Determining

Decision Criteria and data to support decision making. Then, Multiple participation in decision-making and follow up assessment of decision effectiveness is intermediate communication level, and 80% of experts mentioned it. Developing a Decision Process is the lowest, and 70% of experts mentioned it.

For Monitoring/improvement, establish a technical management feedback mechanism frequency are the highest and recognized by 90% experts, It needs important equipment and infrastructure to establish a technical management feedback mechanism. Then, monitoring technical management indicators and Periodic evaluation of technical management and Introduction of technical management tools is intermediate communication level, and 80% of experts mentioned it. Continuous improvement technology management is the lowest, and 70% of experts mentioned it.

For Licensing$joint ventures, Identification of partners and Development of cooperation agreements and Joint research and development projects are the highest and recognized by 90% experts, it needs important equipment and infrastructure to Identification of partners and Development of cooperation agreements and Joint research and development projects. Personnel exchange and training and Monitoring and evaluation is the lowest, and 70% of experts mentioned it.

For organizational change, strengthen performance appraisal are the highest and recognized by 90% experts, it needs important equipment and infrastructure to Strengthen performance appraisal. Then, Improve the organizational structure and Strengthening leadership, promoting Cultural Change is intermediate communication level, and 80% of experts mentioned it. Establishment of specialized departments is the lowest, and 70% of experts mentioned it.

For Project management, develop a project plan and Identify the project team, risk management frequency are the highest and recognized by 90% experts, It needs important equipment and infrastructure to Develop a project plan and Identify the project team, risk management. Then, Resource management and Monitoring and evaluation is the lowest, and 70% of experts mentioned it.

For Technology insertion, Data Analysis and Applications are the highest and recognized by 90% experts, it needs important equipment and infrastructure to Data Analysis and Applications. Then, Technical updates and upgrades and Cloud computing and internet of things, Innovation and R & D is intermediate communication level, and 80% of experts mentioned it. Artificial intelligence applications are the lowest, and 70% of experts mentioned it.

For Incremental development, Continuous integration and User feedback are the highest and recognized by 90% experts, it needs important equipment and infrastructure to Continuous integration and user feedback. And Prototype verification and Set Interim Goals is the lowest, and 70% of experts mentioned it.

For Product management change, change recording and tracking and Change assessment and feedback are the highest and recognized by 90% experts, it needs important equipment and infrastructure to Change recording and tracking and Change assessment and feedback. Change Management Process and Change impact assessment and Change Notification and Communication is the lowest, and 70% of experts mentioned it.

For Complementary assets, Asset Management Planning, asset Monitoring and Tracking, asset Maintenance and Upkeep, Asset Compliance Management frequency are the highest and recognized by 90% experts, it needs important equipment and infrastructure to Asset Management Planning, asset Monitoring and Tracking, asset Maintenance and Upkeep, asset Compliance Management. Asset Renewal and Upgrade is the lowest, and 70% of experts mentioned it.

For Establish strategy, Continuous improvement and innovation, strengthen the talent team are the highest and recognized by 90% experts, it needs important equipment and infrastructure to Continuous improvement and innovation, strengthen the talent team. Determine goals and direction and developing a technology management strategy, establishing an organizational structure is the lowest, and 70% of experts mentioned it.

For Monitor effectiveness, Establishment of supervisory control system and setting up an early warning mechanism and Periodic inspection and evaluation are the highest and recognized by 90% experts, it needs important equipment and infrastructure to Establishment of supervisory control system and Setting up an early warning mechanism and Periodic inspection and evaluation. Enhanced data analysis and Enhanced communication and collaboration is the lowest, and 70% of experts mentioned it.

4.2 Results of evaluate of elements of technology management model for electric vehicle battery industry in China.

Table 4.2 Median and interquartile range of all elements of technology management model for electric vehicle battery industry in China

Elements	Points	Mdn	IQR	Modify items
Identification	technology assessment	4	1	1
	Pre-selection framework	4	1	1
	Technology /market scanning	3.5	1.5	2
	Information management	3.5	1.5	2
Selection	Technology forecasting	4	1	1
	Benchmarking	4	1	1
	Decision criteria&process	4	1	1
	Monitoring/improvement	3.5	1.5	2
Acquisition	Internal R&D	3.5	1.5	3
	Licensing$joint ventures	3.5	1.5	2
	Organisational change	3.5	1.5	2
	Project management	4	1	1
	Technology insertion	3.5	1.5	2
Exploitation	Customer-supplier network	4	1	1
	Incremental development	4	1	1
	Product management	3.5	1.5	2
	Complementary assets	4	1	1
Protection	Identify options	3.5	1.5	2
	Establish strategy	4	1	1
	Monitor effectiveness	4	1	1

Based on the table you provided, which outlines the median and interquartile range (IQR) for various elements of a technology management model within the electric vehicle battery industry in China, a summary can be crafted that translates these statistical insights into a cohesive narrative.

The table indicates a comprehensive evaluation of key components in technology management, revealing prioritization and variability across different aspects. Identification elements like technology assessment and pre-selection framework show a strong median of 4, with a minimal spread (IQR of 1), indicating consensus among experts on their critical importance and relative agreement on their current effectiveness. However, aspects such as internal R&D exhibit a lower median of 2 and a higher IQR of 3, suggesting a significant disparity in perceptions of its current state and a critical area for improvement. The acquisition and exploitation phases, featuring elements like project management and incremental development, similarly reflect high priority (median of 4) with low variability (IQR of 1), highlighting their recognized value and consistent execution within the industry. Protection measures, including establishing strategies and monitoring effectiveness, also receive high medians and low IQRs, underscoring their universal acknowledgment as vital for sustaining competitive advantage.

This statistical portrayal underscores a nuanced landscape of technology management in China's electric vehicle battery sector, revealing a blend of highly regarded, uniformly implemented strategies alongside areas marked by

divergence and necessitating enhancement. The data suggest a strategic focus on strengthening internal R&D capabilities and broadening consensus on less uniformly viewed components could enhance overall technology management efficacy.

4.3 Results of create and evaluate technology management model for electric vehicle battery industry in China.

According to the research results of the part 1 and the part 2, a model of technology management model for electric vehicle battery industry in China can be created, as shown in fig 4.1.

This model consists of 5 technology management links, 20 technology management contents, namely technology Identification, technology Selection, technology acquisition, technology Exploitation, technology Protection. Details are as figure 4.1.

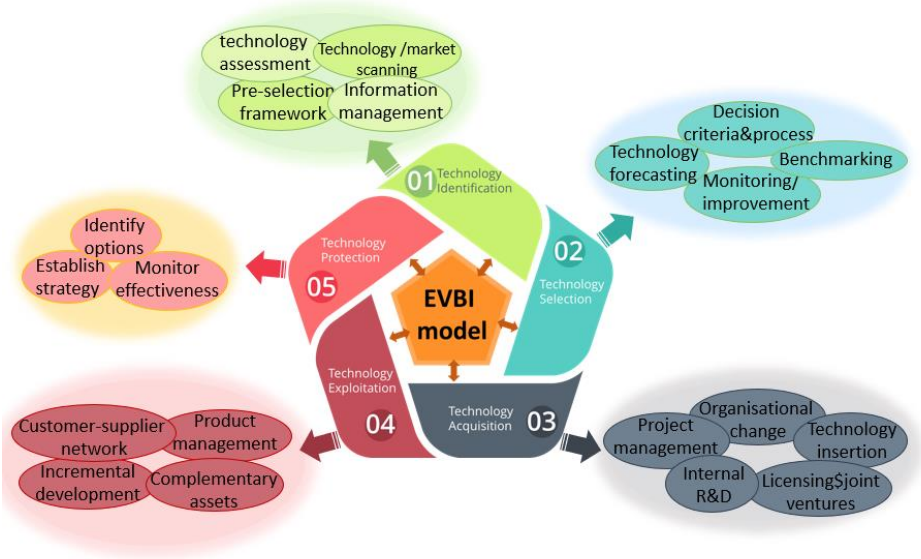

Figure 4.1 A model of technology management model for electric vehicle battery industry in China

The EVBI model consists of five main components, each relating to a critical aspect of technology management:

Technology Identification: This phase involves assessing available technologies, conducting technology/market scanning, and establishing a pre-selection framework to determine which technologies could potentially benefit the organization. Key activities include technology assessment, information management, and identifying options.

Technology Selection: After identifying potential technologies, the organization must choose which technologies to pursue. This involves benchmarking, technology forecasting, and developing decision criteria and processes to ensure the chosen technology aligns with the organization's strategic goals.

Technology Acquisition: Once a technology has been selected, the organization must acquire it. This can involve internal R&D, licensing or joint ventures, and organizational change to integrate the new technology effectively.

Technology Exploitation: With the technology acquired, the focus shifts to leveraging this technology to achieve competitive advantage. This includes project management, technology insertion, and incremental development to refine and improve the technology's application.

Technology Protection: The final phase involves protecting the technology to ensure the organization can maintain its competitive advantage. This includes managing product lifecycle, securing customer-supplier networks, and managing complementary assets to support the technology.

The appropriateness of the EVBI model lies in its holistic approach to managing technology within an organization. By covering every aspect of technology management from identification through to protection, the EVBI model provides a structured framework that organizations can follow to maximize the benefits of new technologies. Each component of the model is critical for ensuring that technology management efforts are comprehensive and aligned with organizational goals.

The EVBI model's strengths include its emphasis on both the strategic and operational aspects of technology management, its flexibility in accommodating different types of technologies and industries, and its focus on the

entire lifecycle of technology management, from identification to protection. This makes the EVBI model highly appropriate for organizations looking to improve their technology management practices and leverage technology for sustainable competitive advantage.

5. Conclusion and Discussion

5.1 Results of data analysis of study the elements of technology management model for electric vehicle battery industry in China.

There are data analysis of 5 technology management links, namely technology Identification, technology Selection, technology Acquisition, technology Exploitation, technology Protection. There are data analysis of 5 technology management links, namely data analysis of technology Identification, data analysis of technology Selection, data analysis of technology Acquisition, data analysis of technology Exploitation, data analysis of technology Protection.

The median (Mdn) scores and interquartile ranges (IQR) for elements like technology assessment, pre-selection framework, technology/market scanning, and information management indicate a robust foundation in the identification phase of technology management within the industry.

Points such as technology forecasting and benchmarking are critical in the selection phase, indicating a proactive approach to future technologies and competitive positioning.

5.2 Results of data analysis obtained from questioning experts, to valuate elements of technology management for the EV battery industry in China.

Evaluate the elements of technology management model for electric vehicle battery industry in China in accordance with the opinions of experts. There are items with a median value of 3.50 and above and an interquartile range of 1.50 and below as follows.

The evaluation reveals strong consensus on the importance of acquisition and exploitation phases, with project management, technology insertion, and customer-supplier network scoring high median values. This suggests effective strategies in incorporating new technologies into operations and leveraging them for market advantage.

The emphasis on internal R&D and licensing/joint ventures highlights the industry's reliance on both internal innovation and external collaborations.

5.3 Results of create and evaluate technology management model for EV industry in China.

The protection phase, focusing on identifying options, establishing strategies, and monitoring effectiveness, underscores the industry's commitment to sustaining its competitive edge through continuous improvement and strategic foresight.

The consistent scoring across the board, particularly the elements rated with a Mdn of 4 and IQR of 1 or less, reflects a comprehensive and well-balanced approach to technology management in the industry, validating the EVBI model's applicability.

6. Recommendations

Studying Shen Zhou's pastoral landscape painting from the perspective of aesthetics, combining with imagology, ecology, philosophy and artistic style, can extract quite rich aesthetic resources from it, and provide new ideas for evaluation, appreciation and painting creation. There is no new idea from the perspective of Shen Zhou's creation method. Shen Zhou life painting creation countless, a large number of pastoral landscape painting for us to describe a harmonious picture, he not only combines the daily farming and reading life with the landscape pastoral scene, but also integrates personal feelings into the landscape pastoral, with the heart of the charm and unity. It is a new thinking to interpret the ecological resources, spiritual consciousness and reference significance of the modern ecological environment, and to interpret the Shenzhou pastoral landscape painting from the perspective of aesthetics.This is consistent with Cao Fanren's theory.

The artistic origin, inheritance and style formation of Shen and Zhou pastoral landscape painting, the influence of later generations, and the enlightenment of this research and creation are systematically combed. The theme of Shenzhou pastoral landscape is classified and sorted out, and the quantitative statistical analysis of the number of pastoral landscape works and the natural scenery, countryside, field, farmhouse, and has a better understanding of the research and analysis of Shenzhou pastoral landscape from the perspective of ecological aesthetics.This is consistent with Chen Chuanqi's theory.

In the thought of traditional Chinese aesthetics, the two theories of Confucianism and Taoism are similar thoughts, which embody the characteristics of "the unity of man and nature". In "man and nature" and "I forget" to define the Chinese rural landscape aesthetics, the relationship between me is always in a state of accommodation, shen zhou pastoral landscape painting in Confucianism and Taoism as the background, the field aesthetics is just the embodiment of all things, all things: "I and you", rural —— ecological aesthetics. It mainly studies from three aspects: the harmonious beauty of equal coexistence, man and man: simple and cordial harmonious beauty, the overall beauty of nature: complementary and fusion, as well as the display of the natural beauty of Shen and Zhou pastoral landscape painting and the relationship between the description of the beauty of social harmony.This is consistent with Shan Guoqiang's theory.

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