

Integrating Art and Local Cultural Heritage into Art Toy Design: A Case Study of the Thamamasasinghathen Busabok, Ubon Ratchathani, Thailand

การบูรณาการศิลปะและมรดกวัฒนธรรมท้องถิ่นในการออกแบบของเล่นศิลปะ:
กรณีศึกษา ธรรมาสน์สิงห์เทินบุษบก จังหวัดอุบลราชธานี ประเทศไทย

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Abstract

Background and Objectives: Thailand is a centre of culture and civilization that supports local wisdom and cultural heritage in its various forms of art, as well as Buddhist art and indigenous art. Ubon Ratchathani province is renowned for its outstanding works of Buddhist craftsmanship, including the Thamamasasinghathen Busabok (Lion Supported Tiered Pulpit) located in the village of Ban Cheethuan, in Khueang Nai district, and it was built during the period from 1925–1927. It blends local artistic traditions with Vietnamese craftsmanship, ultimately becoming an important cultural heritage. With the application of the concept of art toys to the Buddhist artisanal works of the Thamamasasinghathen Busabok, a creative approach can be applied to bridge the gap between the traditional art and cultural symbols of today's society, to enable the transmission of history, culture and community identity to future generations. The purposes of this research are as follows: 1) to study methods of integrating the artistic, cultural, and symbolic elements of the Thamamasasinghathen Busabok into art toy development through systematic analysis of form, meaning, and contemporary design requirements; 2) to develop the prototype of art toys based on the Thamamasasinghathen Busabok; and 3) to assess the level of satisfaction of users with the Thamamasasinghathen Busabok art toys.

Methods: This study employed a research and development approach to create art toys by integrating local art and cultural heritage derived from the Sing Thern Busabok Dhammasana in Khueang Nai district, Ubon Ratchathani province. The study applied the SASMES model within a systems theory framework. The design and development process consisted of data synthesis, selection of key artistic elements, creation of three-dimensional digital prototypes, and refinement based on expert feedback. Research instruments included document and photographic analysis forms, quality evaluation forms completed by 8 experts, and user satisfaction questionnaires administered to 20 participants during a simulated context of the Candle Festival in 2024. Quantitative data were analyzed using mean and standard deviation.

Results: This study found 4 fundamental principles for incorporating cultural heritage into a work of art; selecting key artistic elements, simplifying the design, relating to the current time period, and communicating the cultural relevance of the work of art. Mean ratings from expert evaluations ($n = 8$) of design quality averaged 4.34, and average ratings from user evaluations ($n = 20$) of satisfaction with the product averaged 4.28.

Application of this study: Cultural capital serves as a source of inspiration for the design and development of valuable art toys that are capable of conveying the history and culture of the community in a profound manner. These art toys also possess the potential to function as creative media that promote community identity and local wisdom, while offering an effective approach to preserving and disseminating cultural heritage to younger generations. Furthermore, they can be further developed into creative products for commercial distribution or utilized in cultural activities and creative tourism initiatives.

How to Cite:

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Keywords: art toy, Buddhist art, cultural design, local wisdom, Thamamasasinghathen Busabok

คำสำคัญ: ของเล่นศิลปะ, พุทธศิลป์, การออกแบบเชิงวัฒนธรรม, ภูมิปัญญาท้องถิ่น, ธรรมาสน์สิงห์เทินบุษบก

Conclusions: This study developed art toys to reflect contemporary artistic and cultural symbolism by examining the artistic characteristics, historical background, and symbolic meanings of the Thamamasasinghathen Busabok. These elements were then synthesized into a contemporary design. The findings indicate that the developed art toys are capable of profoundly expressing the cultural and artistic values and identity of the community. Moreover, they demonstrate strong potential as creative media that bridge traditional art with younger generations and can be further developed into community-based products that generate both economic benefits and intangible cultural value.

บทคัดย่อ

ที่มาและวัตถุประสงค์: ประเทศไทยเป็นแหล่งอารยธรรมที่สะสมภูมิปัญญาและศิลปวัฒนธรรมที่สะท้อนผ่านงานศิลปะทั้งพุทธศิลป์และศิลปะพื้นถิ่น โดยจังหวัดอุบลราชธานีมีผลงานพุทธหัตถศิลป์ที่โดดเด่นคือ ธรรมมาสน์สิงห์เทินบุษบก บ้านชีทวน อำเภอเขื่องใน ซึ่งสร้างขึ้นเมื่อราว พ.ศ. 2468–2470 ผสมผสานศิลปะท้องถิ่นและช่างชาวเวียดนาม จนกลายเป็นมรดกทางวัฒนธรรมสำคัญ การนำแนวคิดของเล่นศิลปะมาประยุกต์กับพุทธหัตถศิลป์นี้ จึงเป็นแนวทางสร้างสรรค์ที่ช่วยเชื่อมโยงศิลปะและสัญลักษณ์ทางวัฒนธรรมดั้งเดิมให้สอดคล้องกับบริบทสังคมร่วมสมัย เป็นการถ่ายทอดประวัติศาสตร์ วัฒนธรรม และอัตลักษณ์ชุมชนไปสู่คนรุ่นใหม่ งานวิจัยนี้จึงมีวัตถุประสงค์ 1) เพื่อศึกษาแนวทางการผสมผสานองค์ประกอบทางศิลปะ วัฒนธรรม และสัญลักษณ์ของธรรมมาสน์สิงห์เทินบุษบกเข้ากับการพัฒนาของเล่นศิลปะโดยการวิเคราะห์รูปแบบ ความหมาย และข้อกำหนดการออกแบบร่วมสมัยอย่างเป็นระบบ 2) เพื่อสร้างต้นแบบของเล่นศิลปะธรรมมาสน์สิงห์เทินบุษบก และ 3) เพื่อประเมินความพึงพอใจต่อของเล่นศิลปะธรรมมาสน์สิงห์เทินบุษบก

วิธีการศึกษา: การวิจัยนี้เป็นการวิจัยและพัฒนา มุ่งพัฒนาของเล่นศิลปะโดยบูรณาการศิลปะและมรดกวัฒนธรรมท้องถิ่นจากธรรมมาสน์สิงห์เทินบุษบก อำเภอเขื่องใน จังหวัดอุบลราชธานี ผ่านการประยุกต์ใช้โมเดล SASMES ภายใต้กรอบแนวคิดทฤษฎีระบบ กระบวนการออกแบบประกอบด้วยการสังเคราะห์ข้อมูล การคัดเลือกองค์ประกอบทางศิลปะ การสร้างต้นแบบดิจิทัลสามมิติ และการปรับปรุงต้นแบบตามข้อเสนอแนะผู้เชี่ยวชาญ เครื่องมือวิจัยประกอบด้วยแบบวิเคราะห์เอกสารและภาพถ่าย แบบประเมินคุณภาพต้นแบบโดยผู้เชี่ยวชาญ 8 คน และแบบสอบถามความพึงพอใจของผู้ใช้ 20 คน ในบริบทงานประเพณีแห่เทียนพรรษา พ.ศ. 2567 โดยวิเคราะห์ข้อมูลเชิงปริมาณด้วยค่าเฉลี่ยและส่วนเบี่ยงเบนมาตรฐาน

ผลการศึกษา: การศึกษาี้ได้ระบุ 4 หลักการสำคัญในการบูรณาการมรดกวัฒนธรรม ได้แก่ การคัดเลือกองค์ประกอบศิลปะที่สำคัญ การทำให้รูปแบบเรียบง่าย การเชื่อมโยงกับบริบทร่วมสมัย และการสื่อสารความหมายทางวัฒนธรรม การประเมินโดยผู้เชี่ยวชาญจำนวน 8 คนให้คะแนนคุณภาพการออกแบบโดยเฉลี่ยที่ 4.34 ส่วนการประเมินความพึงพอใจของผู้ใช้จำนวน 20 คนได้คะแนนเฉลี่ยที่ 4.28

การประยุกต์ใช้: ทูทางวัฒนธรรมเป็นแรงบันดาลใจในการออกแบบและพัฒนาของเล่นศิลปะที่มีคุณค่าและสามารถสื่อสารถึงประวัติศาสตร์และวัฒนธรรมชุมชนได้อย่างลึกซึ้ง ทั้งยังมีศักยภาพในการเป็นสื่อสร้างสรรค์ที่ช่วยส่งเสริมเอกลักษณ์และภูมิปัญญาของชุมชน รวมถึงเป็นแนวทางในการรักษาและเผยแพร่มรดกทางวัฒนธรรมให้เข้าถึงคนรุ่นใหม่ นำไปสู่การต่อยอดเป็นผลิตภัณฑ์สร้างสรรค์เพื่อจำหน่าย หรือใช้ในกิจกรรมทางวัฒนธรรมและการท่องเที่ยวเชิงสร้างสรรค์

บทสรุป: งานวิจัยนี้ได้พัฒนาของเล่นศิลปะเพื่อสะท้อนสัญลักษณ์ทางศิลปะและวัฒนธรรมร่วมสมัย โดยศึกษาลักษณะทางศิลปะ ประวัติศาสตร์ และสัญลักษณ์ของธรรมมาสน์สิงห์เทินบุษบก แล้วนำองค์ประกอบเหล่านี้มาสังเคราะห์ข้อมูลเป็นการออกแบบร่วมสมัย ผลการวิจัยชี้ให้เห็นว่าของเล่นศิลปะที่พัฒนาขึ้นสามารถสะท้อนคุณค่าและอัตลักษณ์ทางศิลปะ วัฒนธรรมของชุมชนได้อย่างลึกซึ้ง และมีศักยภาพเป็นสื่อสร้างสรรค์ที่เชื่อมโยงศิลปะโบราณกับคนรุ่นใหม่ และสามารถต่อยอดเป็นผลิตภัณฑ์ชุมชนเพื่อสร้างรายได้และคุณค่าทางจิตใจ

Introduction

Northeastern Thailand is a long-standing major center of civilization with a rich history. Knowledge and wisdom have been passed down through the generations by way of oral traditions, manuscripts, and art, such as both Buddhist art and local arts. It contains the knowledge and wisdom about Buddhism and also includes historical knowledge, cultural knowledge and the practical knowledge required on a day-to-day basis. It represents a type of knowledge transmission and continuance called "cultural resources." The many types of artwork and diversity represent the locally unique cultural resources allowing this knowledge and wisdom to be preserved. The people understand the value of the cultural resources and the applications of them (Samniang et al., 2017). Cultural resources have five main purposes. First, they serve as historical records to validate the chronology of communities and societies. Second, they serve as representations of the

identity and uniqueness of communities, ethnic groups and nations. Third, they function as material witnesses that demonstrate the ability of communities to maintain their standard of living while adapting to their environment and interacting with other societies throughout history. Fourth, they serve as community cultural capital that can be utilized to assist in the development of the community in terms of education, social aspects, culture, economic aspects, political aspects and tourist attractions. And fifth, they serve as a basic component in education, learning, and cultural reproduction, and can result in creative products and contributions for future generations.

Ubon Ratchathani is a province located in the northeast region of Thailand and is considered to be one of the most historically and culturally distinct regions of Thailand. Sanboon & Buranakhet (2009) defined "Buddha Handicraft Art," as art work related to Buddhism, requiring knowledge and skill in utilizing materials, tools, equipment, and a variety of technological processes used in the performance of Buddhist ceremonies. Buddha handicraft art differs from other functional objects because of the symbolic forms of representation, including animals and ornamentation, which express the beliefs of the creator's social status and dignity. As such, Buddha handicraft art reflects the creator's level of devotion and cultural significance to the objects within their community and the aesthetic preferences of the era.

The Thamamasasinghathen Busabok (busabok carved singha with tiered base) located in the sermon hall of Wat Srinuan Saeng Sawang Arom at Ban Chee Thuan, Khueang Nai district, Ubon Ratchathani province, Thailand, is an important and unique representation of Buddha handicraft art and serves as a symbol of the local community's culture. The busabok is unique compared to other busaboks due to its construction materials (brick and cement) and form; it features a lion at the base of the structure that supports a carved wooden prasad at the top which contains carvings depicting deities, and the lion itself with the lion's head at the highest point of the structure (Cultural Information Centre, 2020). The center of the structure includes a stupa shaped area with four rectangular apertures on each side and is adorned with painted images of celestial figures and exotic style flowers. Images of gods and animals from Thai literature are depicted around the lower portion of the base of the structure which resemble a scene of monks listening to sermons.



Figure 1 The Thamamasasinghathen Busabok, Ban Chi Thuan, Chi Thuan Subdistrict, Khueang Nai District, Ubon Ratchathani Province, Thailand
(Source: Thongsan et al., 2024a)

Due to its local art and cultural significance the Thamamasasinghathen Busabok is listed as one of Thailand's cultural heritage sites by the Fine Arts Department. The structure is a reflection of the blending of local art with the craftsmanship of Vietnamese artisans who lived in the area. The construction of the busabok occurred during the time period of B.E. 2468–2470 (1925–1927), the initial construction was completed under the direction of Phra Upachao Wong

Promsaro, while the upper portions of the structure were constructed by Vien, a Vietnamese craftsman. The craftsman who built the naga staircase, the fence surrounding the structure and the swan pillars was Mr. Kamma Sangngam, a national artist. The busabok is used annually for the traditional First Sermon ceremony, a long-standing community event, therefore the busabok is over 100 years old and is considered a culturally valuable heritage (Local Information and Ubon Ratchathani University Archives Section, Ubon Ratchathani University, 2017).

While many recognize the importance of preserving cultural heritage, past preservation efforts have generally failed to engage young people, who are increasingly disconnected from the cultural artifacts of their heritage. Museums and heritage sites preserve tangible objects, however few researchers have examined the creation of innovative ways to translate cultural heritage into contemporary media formats that will both protect the authenticity of the original cultural artifact and also resonate with today's youth audience. This research addresses the gap by exploring the systematic integration of Buddhist Handicraft Art into art toy design as a way to create a connection between traditional culture and the current creative economy.

The process of applying Buddha handicraft art as a model for the creation of designs and development of art toys requires a study that synthesizes information resulting in the integration of cultural capital and creative technology knowledge. This methodological approach seeks to develop new artifacts that reflect the linkage of traditional heritage to modern contexts, based on the increasing popularity of art toys among younger generations as observed in the media. Due to the significance of this issue, the researcher conceptualized and developed art toys based upon the Thamamasasinghathen Busabok that express contemporary artistic and cultural symbols representative of the uniqueness of the community's culture. These art toys represent the aesthetic value of the Buddhist artwork and could potentially serve as a tool for communicating the historical and cultural aspects of the community. They could also possibly evolve into creative products to be sold commercially and/or utilized in cultural activities and creative tourism.

Research Objectives

1. To investigate methods of integrating the artistic, cultural, and symbolic elements of the Thamamasasinghathen Busabok into art toy development through systematic analysis of form, meaning, and contemporary design requirements.
2. To create prototypes of art toys based on the Thamamasasinghathen Busabok.
3. To evaluate user satisfaction with the developed art toys.

Research Methods

The study was approved by The Human Research Ethics Committee, Ubon Ratchathani Rajabhat University, Thailand. Information was gathered by questionnaire in July 2025. Informed consent was obtained from all respondents, who were informed of the study's purpose and advised that participation was voluntary and that they could withdraw at any time, in accordance with ethical guidelines for research involving human subjects. No personal and traceable information was revealed in any section of the study.

This research involves the development of art toys through the fusion of local arts and cultural heritage into modern toy design. This research applies the Research and Development (R&D) method (Siregar, 2025) and the SASMES model based on the System Theory (Harney, 2024). System theory provides a systematic approach to the development of the system comprising the stages of system input, analysis, system design, management, evaluation and system output. These stages provide a systemic process which relates to this study's objectives of linking local art and cultural heritage to develop art toys. System Theory enables a holistic approach to understanding cultural knowledge and its application

in creative design, thus enabling innovation that has cultural, artistic and creative economic value. The study was conducted in Khueang Nai district, Ubon Ratchathani province, Thailand, where the Thamamasasinghathen Busabok is located, serving as the primary cultural source and study area. The design and development procedures followed four key stages: 1) synthesizing artistic, architectural, and symbolic components of the Thamamasasinghathen Busabok, 2) selecting key cultural elements for adaptation, 3) creating simplified digital 3D sculpture prototypes suitable for art toy production, and 4) refining prototypes based on expert feedback before user testing. Data collection employed three types of instruments: 1) A document and photographic analysis form used to examine the artistic elements, architectural characteristics, and symbolic meanings of the Thamamasasinghathen Busabok for application in the design process; 2) an expert evaluation form was used to assess the quality of the art toy design and development in terms of artistic accuracy, design appropriateness, and cultural relevance; and 3) a user satisfaction questionnaire was used to evaluate perceptions, attractiveness, and perceived value of the developed art toy prototypes. The structure of the research framework is therefore as follows.

1. System Input

At this level, the researcher conducted the documentation analysis and related studies on Buddhist art, Thamamas (the traditional Buddhist pulpit) and art toys. Buddhist art includes all artistic works that are used in Buddhism, such as paintings, sculptures and buildings, and it represents the historical, ethical, and communal aspects of Buddhism (Lanwong, Juntapoon, & Punnawa, 2022). Specifically, the Buddhist art of the northeast of Thailand has developed over time depending upon the social context and beliefs of the people, from the beginning of the Rattanakosin period until the present day, during which there was a blending of Thai tradition with Lao culture. The Thamamas is a major religious and artistic product, and is designed to represent a miniature version of a palace or a throne for the representation of the status of the monk (Local Information and Ubon Ratchathani University Archives Section, Ubon Ratchathani University, 2017). In addition, the Thamamas of the northeast region, have demonstrated a unique characteristic of the local artisan who emphasized creativity and spirituality to create products with simplicity but with distinction worth studying and preserving. In addition to the above information on Buddhist art and Thamamas, the researcher also collected data on art toys (or designer toys), collectible sculptures made by artists and designers from materials such as plastic, vinyl, resin and wood (Bou, 2014). Art toys are notable for their uniqueness, and differences from mainstream culture, as well as the limited number of products produced, which give them both aesthetic and creative economy value. Furthermore, the use of digital technologies and 3D printing in the Industry 4.0 era plays a significant role in the commercialization of art toys (Saggiomo, 2022). The combination of these three areas clearly indicated how the local cultural heritage can be integrated with the design of modern art toys.

2. Analysis

This phase evaluated the cultural and artistic values of Thamamas together with technological techniques and capabilities, and the feasibility of incorporating traditional art into new creative media. The goal was to integrate elements of Buddhist craftsmanship to be synthesized for digital 3D sculpting.

3. System Design

The design process was focused on creating art toys representing the community identity using computer graphics software and digital 3D sculpting techniques. The design defined forms, structures, and symbols inspired by Thamamasasinghathen Busabok; additionally, the design defined a prototype production system corresponding to contemporary media and technology.

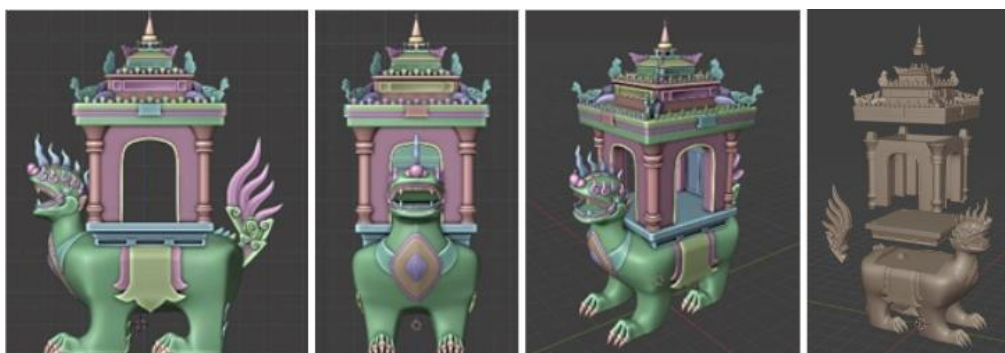


Figure 2 Thamamasasinghathen Busabok in Digital 3D Sculpture Technique

(Source: Thongsan et al., 2024b)

4. Management (Development)

This stage coordinated the development of prototypes based on the design developed using 3D printing technology and resin as the material. Resin was used due to its ability to produce realistic details, a surface finish, and its potential for future uses. Additionally, the development process included community and team members participating in (1) transferring the technique of producing prototypes, and (2) transmitting cultural values and understanding.

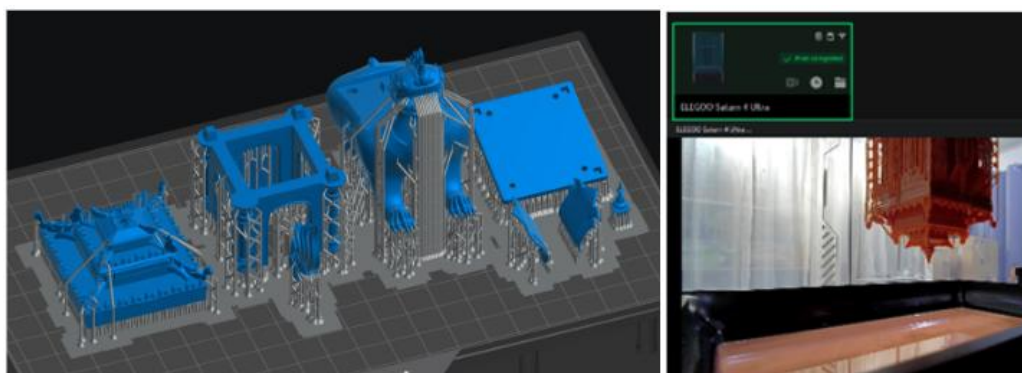


Figure 3 3D Printing of Thamamasasinghathen Busabok

(Source: Thongsan et al., 2024c)

5. Evaluation

Evaluations of both artistic value and cultural accuracy were carried out by a panel of eight experts that were chosen based on purposeful sampling so that the experts could evaluate each piece in detail. The panel comprised experts from a variety of areas such as Thai Buddhist handicrafts, multimedia technologies, digital 3D sculptures and art toy design; although the number of experts was small enough to allow for effective coordination. Evaluations were completed concurrently with a user satisfaction assessment of twenty participants, which were selected via purposeful sampling, as well as being interested in art toys. The user assessments were held in a simulated environment during the 2024 Candle Festival (Khao Phansa procession) in Ubon Ratchathani. The data were collected via a 5-point Likert scale questionnaire and analyzed using means and standard deviations to assess user satisfaction level according to the Likert scale interpretation method of Boone & Boone (2012). The 5-point Likert scale interpretation method is outlined as follows:

Mean Score Range	Quality Level	Satisfaction Level
4.50 - 5.00	Very Good	Very High
3.50 - 4.49	Good	High

2.50 - 3.49	Moderate	Moderate
1.50 - 2.49	Fair	Low
1.00 - 1.49	Needs Improvement	Very Low

To validate the data collection instruments, all were tested for content validity by three measurement and evaluation experts using the Index of Item-Objective Congruence (IOC) to determine how clearly, completely and appropriately the instruments would measure the intended objectives. Items with an IOC score less than .50 were excluded from further analysis.

6. System Output

As a result of the system, a prototype art toy that could be used to convey cultural values to younger generations was produced. There are opportunities to further develop the product in the form of commercial products, educational experiences, or cultural tourism-related initiatives.

Research Results

1. Integration of Art from the Thamamasasinghathen Busabok into Art Toy Design and Development

The incorporation of Thamamasasinghathen Busabok Art in an art toy design and development project was executed by integrating the results of research regarding art characteristics, cultural background, and symbolic values. This methodology has four major components:

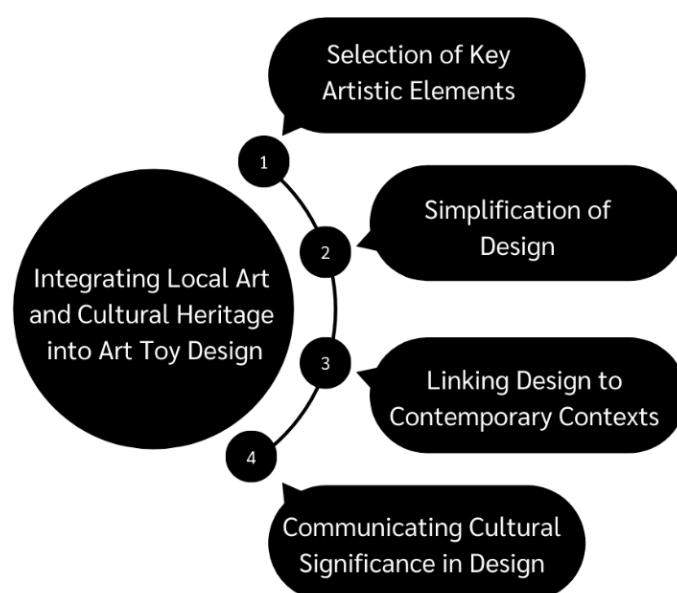


Figure 4 Four Key Principles for Integrating Local Art and Cultural Heritage into Art Toy Design

(Source: Thongsan et al., 2024d)

1.1. Selection of Key Artistic Elements

Important artistic elements must represent the identity of Buddhism and its symbolic representations. The artistic aspects of the Thamamasasinghathen Busabok located in Khueang Nai district, Ubon Ratchathani, include (1) the miniaturized version of the "busabok" throne. The architectural form of the "busabok" (tiered spired pavilion) is used as a small-scale replica of a royal seat or palace and it provides symbolic value by indicating the elevated status of the sermon

and its sacredness. It invites the Dharma to ascend to the "high" and honored "top of the pavilion," the most suitable place to listen to important sermons during major Buddhist celebrations. (2) A lion (Singha) base supports the entire structure. The lion symbolizes power, stability, and protection. The lion's function as a base indicates the empowerment and stability that they provide to the objects placed upon them, and also elevate the busabok or throne to the highest and most impressive position possible, suitable for containing the Buddhist teachings. (3) Decorative flame-like designs (Kanok) have been created throughout various portions of the lion. Kanok is a traditional Thai-Buddhist motif, with curved lines that resemble flames and are commonly found in Buddhist art and sculptural traditions of Thai-Lan Chang and Isan regions. By placing the Kanok motifs at the lion's head, legs, tail, or wings, it unites mythological symbolism with artistic ornamentation and indicates power, elegance, and protection. The tail motifs can symbolize swiftness while head motifs symbolize intellect and bravery.



Figure 5 (A) Thamamas in Busabok Form (B) Singha Head (C) Singha Tail
(Source: Thongsan et al., 2024e)

1.2. Simplification of Design

The design was simplified for use in art toys that meet the requirements of size, materials, and production. During 3D digital modeling, the decorative details of the design were reduced to symbolic lines, so as to quickly and inexpensively create the high-quality prototype models while maintaining the original meaning of the Thamamasasinghathen Busabok.



Figure 6 Thamamasasinghathen Busabok Design for Art Toy Production
(Source: Thongsan et al., 2024f)

1.3. Linking Design to Contemporary Contexts

Contemporary color palettes and materials were utilized in order to attract modern target audiences, specifically collectors and art toy fans.



Figure 7 Thamamasasinghathen Busabok with Different Color Variations

(Source: Thongsan et al., 2024g)

1.4. Communicating Cultural Significance in Design

By using symbols such as the lion, which symbolizes power and protection, the busabok, which signifies sacredness, and the Kanok motifs, which are representative of the local culture, the art toy fulfills a dual role as a play item as well as a medium of communication of cultural and artistic narratives.



Figure 8. Thamamasasinghathen Busabok was Exhibited and Sold

During the Candle Festival Tradition in Ubon Ratchathani Province, Thailand, in 2024

(Source: Thongsan et al., 2024h)

These four design principles derived from the Thamamasasinghathen Busabok are essential in the creation of art toys that reflect the identity and culture of the community. These four design principles are the foundation for both creative products as well as cultural learning media, utilizing artistic elements in a way that is applicable to contemporary creative practices and maintain the original cultural values of the artistic and intellectual heritage of the community.

2. Results of the Creation of Art Toy Prototypes Based on the Thamamasasinghathen Busabok

Based on data collected through surveys evaluating the design and development of the art toys, feedback was obtained from 8 experts. The results are presented in Table 1.

Table 1 Mean and Standard Deviation of the Design and Development Quality of Art Toys Based on Thamamasasinghathen Busabok

Evaluation List	Mean	S.D.	Quality Level
Design			
1. The use of color, shape, and materials is harmonious and appropriate for the art toy.	4.25	0.46	Good
2. The form of the art toy is balanced and appears natural.	4.50	0.53	Good
Overall Design Score	4.38	0.50	Good
Uniqueness			
3. The art toy has a distinct uniqueness that makes it stand out from other art toys.	4.25	0.71	Good
4. The art toy has the ability to create a memorable impression for consumers.	4.63	0.52	Very Good
Overall Uniqueness Score	4.44	0.61	Good
Connection to Art and Culture			
5. The art toy reflects recognizable art or cultural elements.	4.13	0.64	Good
6. The art toy effectively communicates stories or meanings linked to culture or art.	4.25	0.46	Good
7. Accuracy and completeness of the Buddhist craftsmanship details in the Thamamasasinghathen Busabok art toy.	4.38	0.52	Good
Overall Connection to Art and Culture Score	4.25	0.54	Good
Total Score	4.34	0.55	Good

The evaluation of the design and development quality of art toys based on Thamamasasinghathen Busabok revealed that the overall quality was at a good level (mean = 4.34, S.D. = 0.55). In terms of design, the results were also at a good level (mean = 4.38, S.D. = 0.50), indicating that the use of colors, shapes, and materials was appropriate and harmonious for the art toy, and the form appeared balanced and natural. For uniqueness, the evaluation reached a good level (mean = 4.44, S.D. = 0.61), showing that the art toy possessed distinctive characteristics, making it stand out and leaving a memorable impression on consumers. Regarding connection to art and culture, the results were also at a good level (mean = 4.25, S.D. = 0.54), suggesting that the art toy effectively reflected recognizable artistic and cultural elements, communicated cultural meanings and stories, and accurately conveyed the Buddhist craftsmanship details of the Thamamasasinghathen Busabok.

3. Results of the Evaluation of User Satisfaction with the Developed Art Toys

Based on data collected through surveys evaluating the design and development of the art toys, feedback was obtained from 8 experts. The results are presented in Table 2.

Table 2 Mean and Standard Deviation of User Satisfaction Evaluation of Art Toys Based on the Thamamasasinghathen Busabok

Evaluation List	Mean	S.D.	Satisfaction Level
1. Appropriateness of the color tone design of the art toy	4.20	0.62	High
2. Distinctiveness and attractiveness of the art toy's form	4.20	0.62	High
3. Satisfaction with the creation of the Thamamasasinghathen Busabok art toy in 3D format	4.25	0.55	High
4. Whether the art toy presents in an appealing way that creates a lasting impression on consumers	4.25	0.55	High
5. Overall aesthetic appropriateness and beauty of the art toy	4.15	0.67	High
6. Appropriateness of the size and convenience for storing or displaying the art toy	4.05	0.51	High
7. The art toy adds emotional value or has long-term attractiveness for collectors	4.55	0.60	Very high
8. Feasibility of developing the Thamamasasinghathen Busabok art toy into a cultural product	4.45	0.69	High
9. Appropriateness of the Thamamasasinghathen Busabok for further development as an art toy	4.40	0.60	High
Total Score	4.28	0.61	High

From Table 2, the results of the user satisfaction evaluation toward the art toys based on the Thamamasasinghathen Busabok were at a high level (mean = 4.28, S.D. = 0.61). The item with the highest mean score was “The art toy adds emotional value or has long-term attractiveness for collectors” (mean = 4.55, S.D. = 0.60), which was rated at a very high level, indicating that the art toys can create emotional attachment and significantly attract collectors. In contrast, the item with the lowest mean score was “Appropriateness of the size and convenience for storing or displaying the art toy” (mean = 4.05, S.D. = 0.51), which still remained at a high level. Overall, these findings demonstrate that users were generally satisfied with the art toys to a highly satisfactory degree.

Discussion and Conclusion

This study demonstrates the role of local cultural education in the development of art toys, bridging traditional artistic wisdom with contemporary design processes. Thamamasasinghathen Busabok at Ban Chee Thuan, Khueang Nai, Ubon Ratchathani, Thailand, served as the case study. The development of art toys not only reflects aesthetic value but also functions as a medium for conveying cultural values, beliefs, and local identity to a broader society.

First, the selection of key artistic elements—such as the Busabok, symbolizing nobility and sanctity; the Singha, representing power, authority, and protection; and traditional Kanok patterns, reflecting local artistic craftsmanship—provides a strong foundation rooted in local artistry and rich symbolic meaning.

Second, design simplification is implemented to accommodate materials and production processes, particularly through 3D digital techniques that reduce complexity while preserving traditional distinctiveness. This approach facilitates industrial-scale production and enhances the accessibility of traditional art for modern audiences.

Third, the design is linked to contemporary contexts by incorporating modern interpretations of color, materials, and symbolism. This strategy enables art toys to appeal to collectors and contemporary art enthusiasts while creating opportunities for commercialization and the development of the creative economy at both national and international levels.

Fourth, cultural significance is communicated through design, allowing art toys to function not only as collectibles or decorative objects but also as educational media that connect audiences with artistic and cultural narratives. Objects that might otherwise remain confined to temples or museums are thereby integrated into everyday life and contemporary society.

The findings of this study reveal a clear connection with previous research on the role of traditional art in contemporary contexts and local cultural education. Consistent with Lanwong, Juntapoon, & Punpawa (2022), who emphasized that Buddhist art not only serves religious purposes but also functions as cultural capital capable of promoting tourism and supporting the creative economy. Using Thamamasasinghathen Busabok and Singha motifs as prototypes for art toys demonstrates their economic potential and value as cultural products. This approach also enables students and designers to engage directly with local artistic concepts, patterns, and symbols in a tangible way. The results also align with Kantipat, Pengchai, & Khongyuen (2024), who noted that art toys inspired by local art forms can create distinctive identities and attract collectors.

The design process of art toys based on Thamamasasinghathen Busabok and Singha involves selecting key artistic elements; adapting designs to suit materials and production techniques, such as 3D digital modeling and 3D printing prototypes; and linking symbolic interpretations with contemporary contexts. These strategies allow art toys to reflect the aesthetic beauty of traditional art while effectively communicating cultural values and historical narratives to consumers, while also enabling feasible industrial-scale production.

Furthermore, the study supports findings by Chantarasakha & Panthupkorn (2019) regarding the educational benefits of integrating cultural heritage into toys, as it enhances learning skills, social development, and the preservation of local wisdom. Art toys thus can be educational media that connect young people closely with art and culture. In addition, the results correspond with Fan & Vanitwattananuwat (2020), who suggested that art toys can foster emotional attachment and reduce stress, reflecting the cognitive, cultural, and emotional value that Thamamasasinghathen Busabok-inspired art toys provide.

Overall, this study highlights that developing art toys from local cultural heritage, specifically from Thamamasasinghathen Busabok and Singha, is not merely a process of creating collectibles or decorative items. It is a key mechanism for enhancing Thailand's soft power by disseminating cultural heritage in contemporary, accessible forms. This approach supports the preservation, transmission, and expansion of local wisdom, strengthens cultural identity, and holds potential to promote the creative economy through educational, design, and societal engagement dimensions. Consequently, this research is significant for academia, design practice, and the future development of cultural industries.

This study faced several challenges that warrant critical reflection. One major tension exists between maintaining cultural authenticity and achieving commercial appeal. Simplifying traditional artistic elements for production scalability risks losing essential cultural meanings, yet excessive complexity may hinder market acceptance. Finding the appropriate level of design simplification that preserves symbolic significance while supporting manufacturability remains a delicate balance. Additionally, balancing conservation principles with market demands posed practical difficulties. While the preservation of artistic and intellectual heritage is paramount, adapting traditional art forms for contemporary consumer products requires negotiation between cultural respect and economic viability. These challenges highlight the need for ongoing dialogue between cultural custodians, designers, and market stakeholders to develop sustainable models for cultural heritage-based products.

Limitations

This research has several limitations that should be considered for interpreting the results and guiding future studies as follows:

1. The sample size in this study was limited. Although appropriate for qualitative research and prototype evaluation, it may not fully represent the broader user population.
2. The study focused exclusively on the cultural heritage of Ubon Ratchathani province, limiting the geographic scope and generalizability to other local cultural contexts.
3. The user satisfaction assessment was conducted within the context of the Candle Festival tradition, a specific setting characterized by a strong cultural atmosphere and emotional engagement, which may introduce positive bias.
4. The evaluation of art toy designs focused on digital and physical prototypes at a limited scale, without testing actual industrial-scale production processes, which may affect the long-term feasibility of the products.

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