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Reimagining ramappa temple designs: A contemporary textile design exploration

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Abstract

India is home to some of the world's most passionately religious communities and cultures, making it one of the most religiously diverse countries. It boasts a distinctive ancient culture rich in craftsmanship and art, vital to our heritage. Indian heritage provides valuable insights and examples of the nation's various indigenous crafts, paintings, and artworks. The present study draws inspiration from the sculptural designs of the Ramappa temple, located in Mulugu district, Telangana. The temple was constructed in 1213 CE during the reign of the Kakatiya dynasty, under the patronage of Recherla Rudra, a general of King Ganapati Deva. To gather sculptural designs of the temple, designs were physically collected. Many monumental and architectural designs have been lost to time, rendered inconspicuous by the ravages of history. They have been redrawn to honour their legacy and breathe new life into these masterpieces for the present study, highlighting their cultural importance and ensuring their stories endure. There are various categories of motifs available in the temple, like human figures, animal, floral designs. Ten specific motifs were selected from the collected motifs and digitized using CorelDRAW 2025 software. From the developed digital catalogue, motifs suitable for dupattas were selected and colour combinations were created using photoshop software. Finally dupattas were hand painted to enhance their uniqueness. The hand painted dupattas were well received by consumers.

Keywords: Motifs, sculptural designs, design development, digitization, design layouts, hand painting

Introduction

The temples play an important role in cultural and spiritual life of Indians. The temple's exquisite stone carvings served as an inspiration for a few textile and apparel designs. Monumental designs that depict Indian architecture can convey the traditions of India. Most of these beautiful architectures have intricate structural designs that can be used to extract motifs for designing and development of motif through various methods like weaving, painting, printing etc. India, 'the land of culture and heritage,' is blessed with numerous historical monuments that reflect India's breathtaking architecture and intricate architectural work. Introducing these monumental designs in textiles can be a way to preserve the Indian culture, and it will be an innovative mode of showcasing the uniqueness of Indian monumental art in textiles. (Khandekar, N. 2016) [5].

Warangal, a vibrant city in the heart of Telangana, is steeped in a rich and captivating history that reflects the region's cultural heritage. In 2014, Warangal was recognized as the "Best Heritage City" from the Union Ministry of Tourism, Government of India, as part of the National Tourism Awards for 2014-2015. In 1163 CE, the city of Orugallu, later known as Warangal was established as the capital of the Kakatiya dynasty. This shift was

orchestrated by Rudradeva (Prataparudra I), who declared independence and relocated the capital from Hanamkonda.. This moment marked the Kakatiyas' rise as a sovereign power in the Deccan region (Yazdani, 1960). In 2015, the Indian government chose Warangal as part of the HRIDAY (National Heritage City Development and Augmentation Yojana) initiative. This initiative aimed to preserve and enhance the city's cultural heritage, particularly its significant examples of Kakatiya style art and architecture (Ministry of Tourism, 2015). The Ramappa Temple, also known as the Rudreshwara Temple, is situated in Palampet village of Venkatapur Mandal in Mulugu district, Telangana. The temple is 15 km from Mulugu in turn that is 66 km from Warangal and 209 km from Hyderabad. Prior to the administrative reorganization in 2016, the temple was part of the erstwhile Warangal district. The temple was constructed in the 13th century under the patronage of the Kakatiya dynasty, exemplifies the architectural sophistication of its time. In recognition of its cultural and historical significance, it was inscribed as a UNESCO World Heritage Site in July 2021 during the 44th session of the World Heritage Committee. The Kakatiya dynasty flourished in the Deccan region of South India from the 12th century to the early 14th century and is celebrated for its

significant contributions to architecture and art. This period marked the peak of temple architecture and fortification in the region.

In the continually evolving world of fashion today, designers and producers are constantly waiting for something new and unusual to fit the rapidly expanding market. Therefore, the original design can be further refined and enhanced through digitization, resulting in a final outcome that retains its core characteristics while exhibiting small and distinctive variations. (Tarai, M. 2023) ^[11].

Promoting any handicraft sector relies heavily on creating innovative marketing ideas and concepts that align with customer needs. This can be achieved through a flexible production system, a diverse design base, the ability to produce small to medium volumes of high-quality designs, and a quick transition to product diversification. Product diversification can be developed by incorporating traditional art with necessary changes and slight modifications. Nirmal paintings of Nirmal district, for example, originated around temples, forts, and palaces, but has since expanded into homes, hotels, offices, and other corporate spaces. It has evolved to fit modern interior decoration and architectural styles, showcasing the rich social heritage of traditional craftsmanship. These elements are increasingly important in the context of initiatives like "Make in India" and other localized product development concepts. (Challa, L. and Gahlot, M. 2020) ^[12].

Materials and Methods

Locale of the study

The research was conducted during November 2024 to May 2025 the research work was conducted in Palampet village in the Mulugu district of Telangana, India. Geographically, it is located at 18.2290° N latitude and 79.9435° E longitude, near the banks of the Ramappa Lake, which enhances the cultural and environmental context of the site. The research work has been carried out on design documentation and textile design exploration from Ramappa temple architecture. The Ramappa Temple offers a wealth of inspiration for textile design development, particularly due to its intricate architectural elements and symbolic motifs.

Documentation of architectural designs

The researcher visited Ramappa temple, and captured the designs. The documentation of designs was done from captured photographs from Ramappa temple architect. The collected designs can be categorized as human figurine, animal, floral and geometrical designs. The designs were collected from the temple by using both primary (captured photographs) and secondary (internet and ASI (Archaeological Survey of India) reports) sources of information.

The Ramappa Temple, is named after its principal sculptor, Ramappa, and is the only temple named after its creator. This temple, shown in figures 1 and 2, is renowned for its intricate stone carvings that illustrate scenes from the epics like Ramayana, Mahabharata, musicians, warriors, and scenes of daily life on its walls, pillars, and ceilings. Ramappa/Rudreswara/Ramalingeswara Swamy temple complex also referred as "Temple of Dance". This 800 years old temple dates back to 1123-1323 CE (Common Era) or

1213 AD (Anno Domini) or 12th century construction. The Ramappa group of temples stands as a jewel in the crown of the Kakatiyan style Hindu architecture, filled with masterpieces of Indian sculptural art and architectural marvels. The Kakatiya dynasty (12th-14th centuries) in South India is renowned for its remarkable temple architecture and fortifications. The temple was built around a vast artificial lake as a water resource to help in irrigation. Mr. Recharla Rudra, the chief of army during the rule of Ganapatideva, built this temple complex. (ASI report 2017)



Fig 1: The Ramappa temple



Fig 2: Eastern view of Ramappa temple

The entire temple complex, with the Rudreswara temple (dedicated to Lord Shiva) as the main temple, a Nandi Mandapa, Kateswara, and Kameswara as subsidiary temples on the north side, and the Rudreswara temple on the south side, is steeped in history. A dharmasala (Pilgrim shelter) and a pakara (enclosure wall) surround the entire temple complex, serving as a testament to its enduring legacy. The Kateswara temple Garbhagriha is named "Trikuta," which resonates with the temple's historical significance.

The Rameswara temple, the only four-tiered pyramidal structure that remains undamaged, stands as a beacon of hope amidst the partially damaged Kateswara temple and Nandi mandap. The wholly ruined and unsafe approach to Kameswara temple serves as a stark reminder of the urgent need for preservation and restoration in the current scenario. The temple covers more than 82 km in area. The prefabricated Ramappa temple is built of reddish and white tinged sandstone and shows beautiful brick Shikaras and Ardhashikaras in front, following the architectural style of the Chalukya pattern, known for its intricate carvings and elaborate structures. The temple columns were black basalt

rich in iron, magnesium, and silica. The unique feature of this temple complex is the use of feather-light spongy bricks that float in water and the Sandbox technique of laying the foundation, a remarkable feat of engineering from the 13th century. The temple foundation was filled with a mixture of sand-lime, jaggery, and black Karakkaya fruit (myrobolan) that acts as a cushion to protect the temple's foundation from earthquakes.

The plan of the main temple Rameswara is a flight of five steps leading to the stepped diamond or star-shaped basement platform of six feet high and forms the entrance Mandapa. The Kakatiya's favor of dance and art is highlighted by elaborate statues of dancers in various positions. As evident from Figure 3, the temple plan, the flight of steps leads to the Mandapa from the three sides.

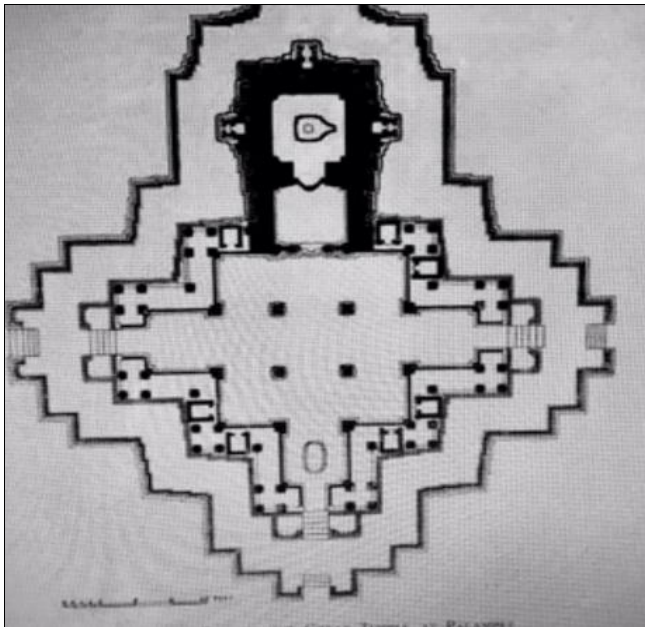


Fig-3: Rudeswara/Ramappa temple plan



Scoure: ASI archives

Fig 4 and 5: Madanikas

The prominent temple features include, intricately decorated walls, pillars, and ceilings adorned with elaborate carvings. The temple brackets showcase mythical animals, female dancers, and musicians. Among these, the twelve bracket figures of the Madanikas (Figure 4 and 5) exemplify the skilled artistry of the period, which involved using chisels on black basalt to create exquisite figures in graceful, rhythmic poses. This artistry is related to a dance treatise

known as Nrityaratnavali, authored by Jayasenapati, a general in the Kakatiya's army. Another prominent aspect of Kakatiya sculptural art is the Nandi (bull) (Figure 7), depicted in an attentive pose. The wall friezes of the temple feature motifs such as four petaled flowers, half-moons on the outer edges, and single figures positioned between two pillars, alongside elephants and lions. These individual designs depict a variety of scenes, including women styling their hair, donning sarees, applying vermillion to their foreheads, huntresses, chauri bearers, drummers, mithuna couples, devotees of Shiva and Shakti, Bhairava, Surya, Nrithya-Ganesh, Narasimha, shielded soldiers, Jain Tirthankaras (saviour) etc. The madanikas or Salabhanjikas, of the Rameswara temple are integral to the tall, elegant black bracket figures on the pillars, with two figures on each side of the entrances. These figures stand eternally in slender, graceful dancing poses and historically, they have been referred to as Nagini, Jagan Mohini. The huntresses with bows and arrows, and drummers, among other representations of stone carvings.

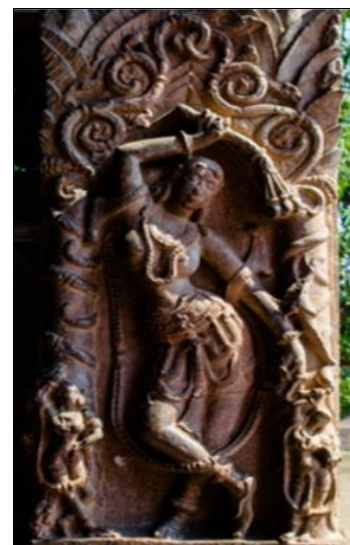


Fig 6: Dancing Madanika



Fig 7: Nandi Statue

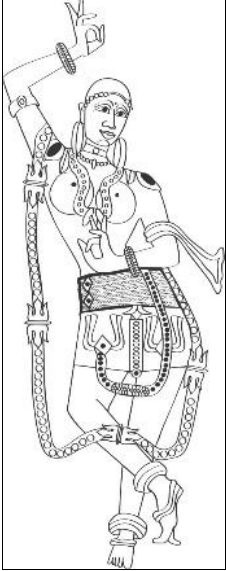
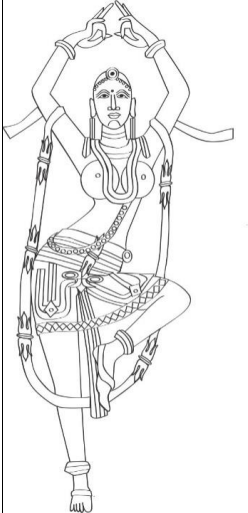
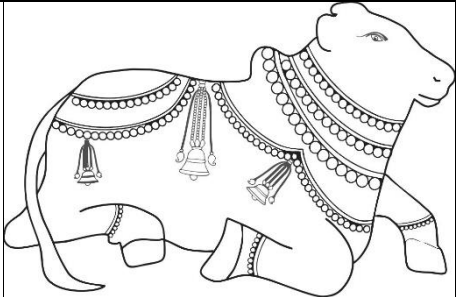
Selection of motifs for textile designing

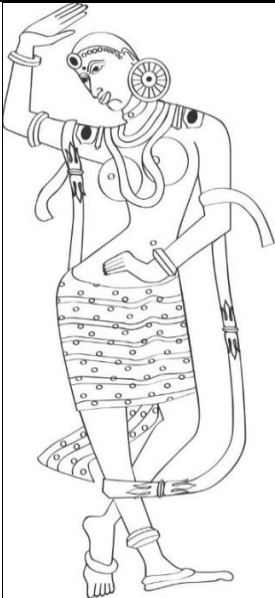
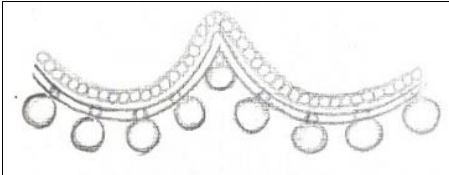
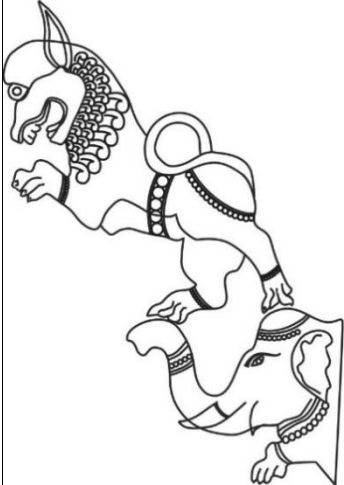
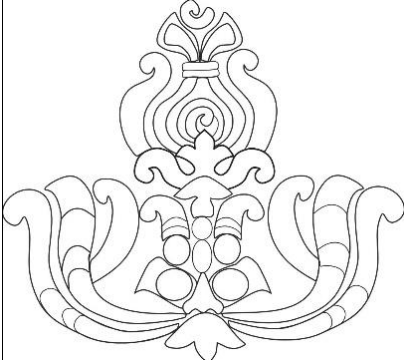
Clarity in the carved architectural designs served as the basis for selecting and analysis, and care was taken to ensure that no designs were repeated. Total eighty designs were collected from primary and secondary data collected

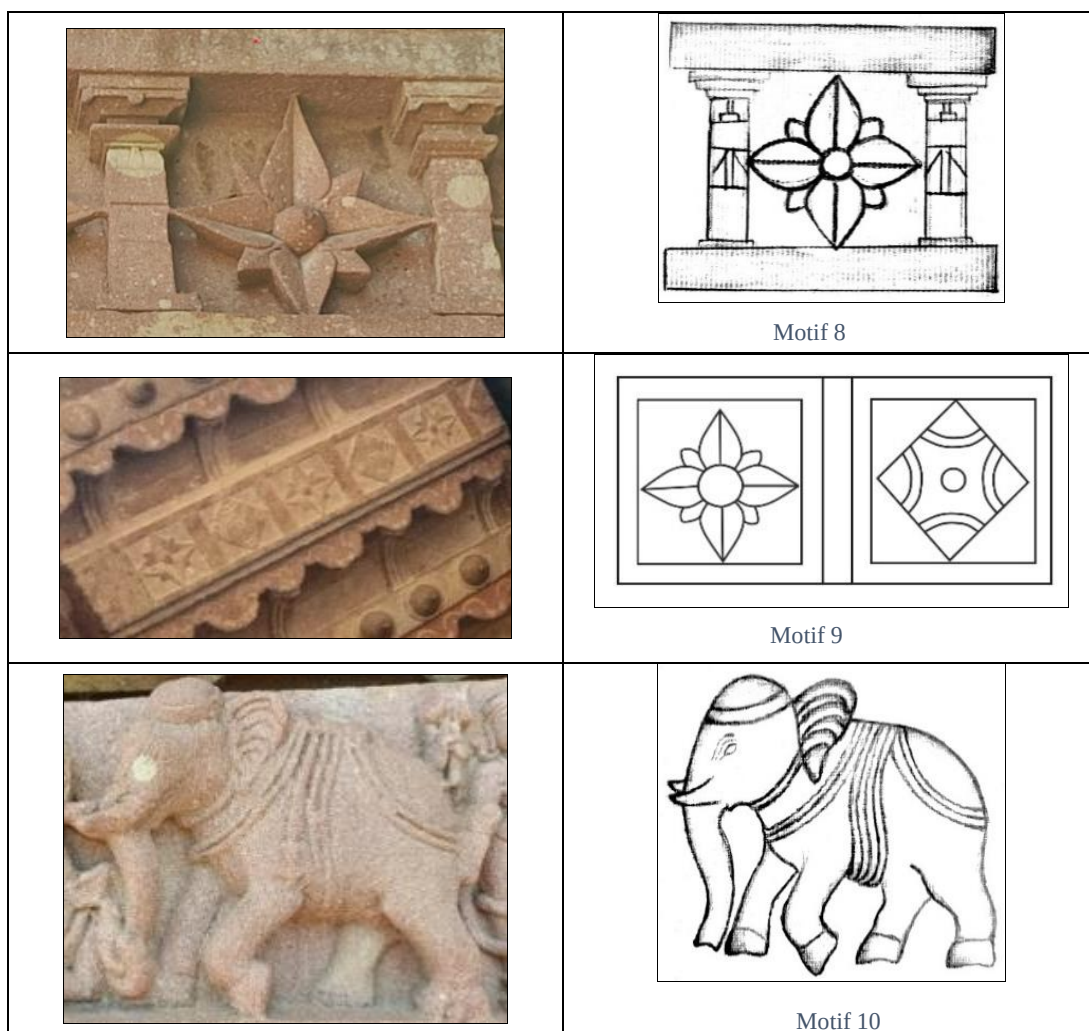
about Ramappa Temple architecture. Out of eighty designs, ten motifs were selected, based on its suitability in forming layouts for dupattas. The selected ten motifs were reimaged and modified based on their scope for design development, using CAD (Computer-Aided Design) software. Computer aided design facilitates the alteration or simulation of

designs or motifs, and hence, CorelDraw 2025 software was utilized as the design software to simplify and alter the original designs. The free hand, pen, Bezier and b-spline tools for drawing, shape, smooth tools for smoothening were used.

Table 1: selected ten digitized motifs

Original motif	Reimaged textile motif
	 Motif 1
	 Motif 2
	 Motif 3

	 Motif 4
	 Motif 5
	 Motif 6
	 Motif 7



All the ten digitized motifs were shown to a panel of 30 judges for selection of motifs for textile design development for dupatta. A five-point rating scale was employed to gauge each design's visual and contextual appeal. On this scale, a score of 5 denoted excellent, 4 indicated Very Good, 3 represented good, 2 stood for fair, and 1 reflected poor performance. A panel of judges including staff of Apparel and Textile Science department, UG and PG students of the college. Weighted mean scores were calculated from the subjective evaluation for all the ten motifs. Among the ten digitized motifs two top ranking motifs were selected from the subjective evaluation.

The evaluation of the sculpture-based motifs was conducted using a five-point rating scale, where scores ranged from 1 (Poor) to 5 (Excellent). Expert evaluators assessed each motif based on suitability for adaptation in textile design. The collected scores were tabulated, and mean values were computed for each motif. The mean scores for each motif were calculated, and rankings were assigned accordingly to identify the most suitable designs for further development." Motifs that received higher ratings typically exhibited balanced composition, detailed ornamentation, and symbolic richness, making them particularly suitable for textile adaptation. Two primary and ancillary motifs (i.e., motif numbers 1 and 6) were selected for design development from the finalized ten motifs. From the ten motifs selected by researcher, motif 6 got the highest WMS value of 4.43, and it was assigned rank I, followed by motif 1, which got

the second highest WMS value of 4.30, and was assigned II rank. The motifs which scored the highest ranking were selected for design development.

Table 2: Selection of motifs

Motif No	WMS	Rank
1.	4.30	II
2.	3.96	V
3.	4.14	IV
4.	4.21	III
5.	3.43	IX
6.	4.43	I
7.	3.87	VI
8.	3.57	VIII
9.	3.33	X
10.	3.82	VII

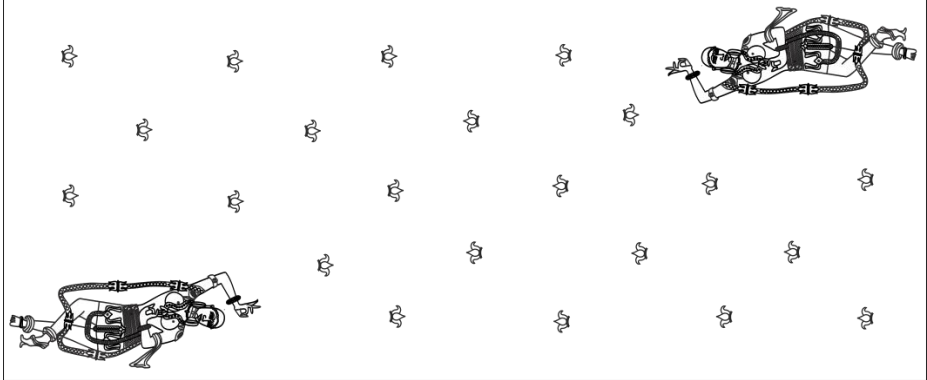
Development of textile design layouts

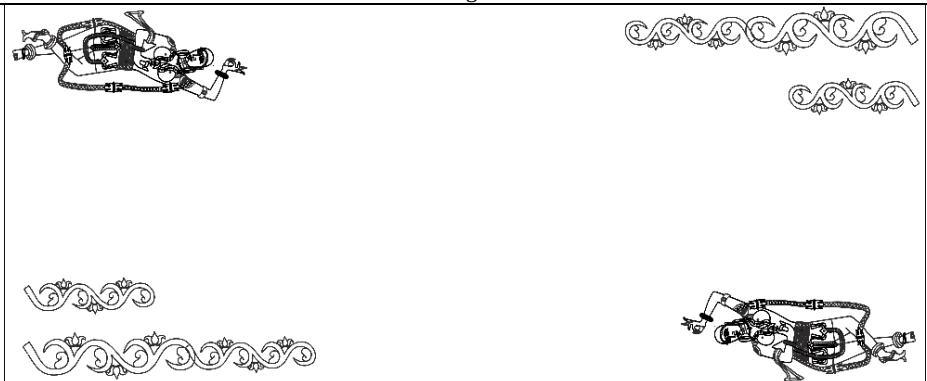
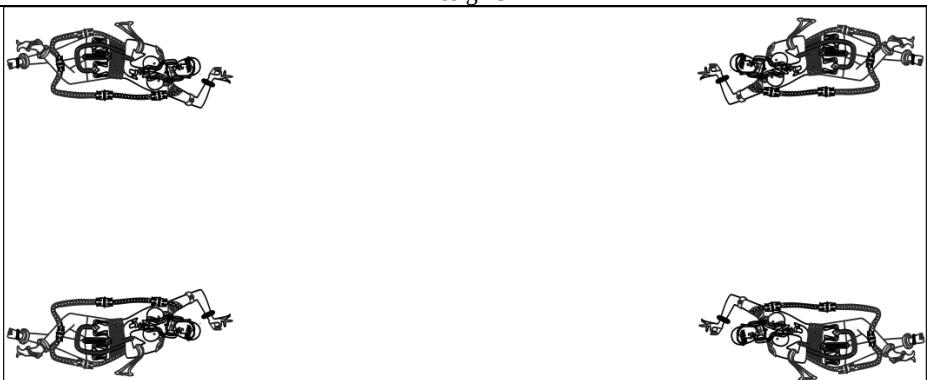
Two selected primary motifs and two ancillary motifs that complement each other were used for dupatta design layouts. A total of eight design layouts were developed using photoshop software. In order to choose the top-ranking design from the developed eight designs, the evaluation was conducted based on selection of motifs and their combination, placement of the design and overall appearance. (Fatima, N., & Sharma, E. 2010) ^[4]. A five-point rating system was used to assess the sculpture designs, with five being excellent, four being very good, three being

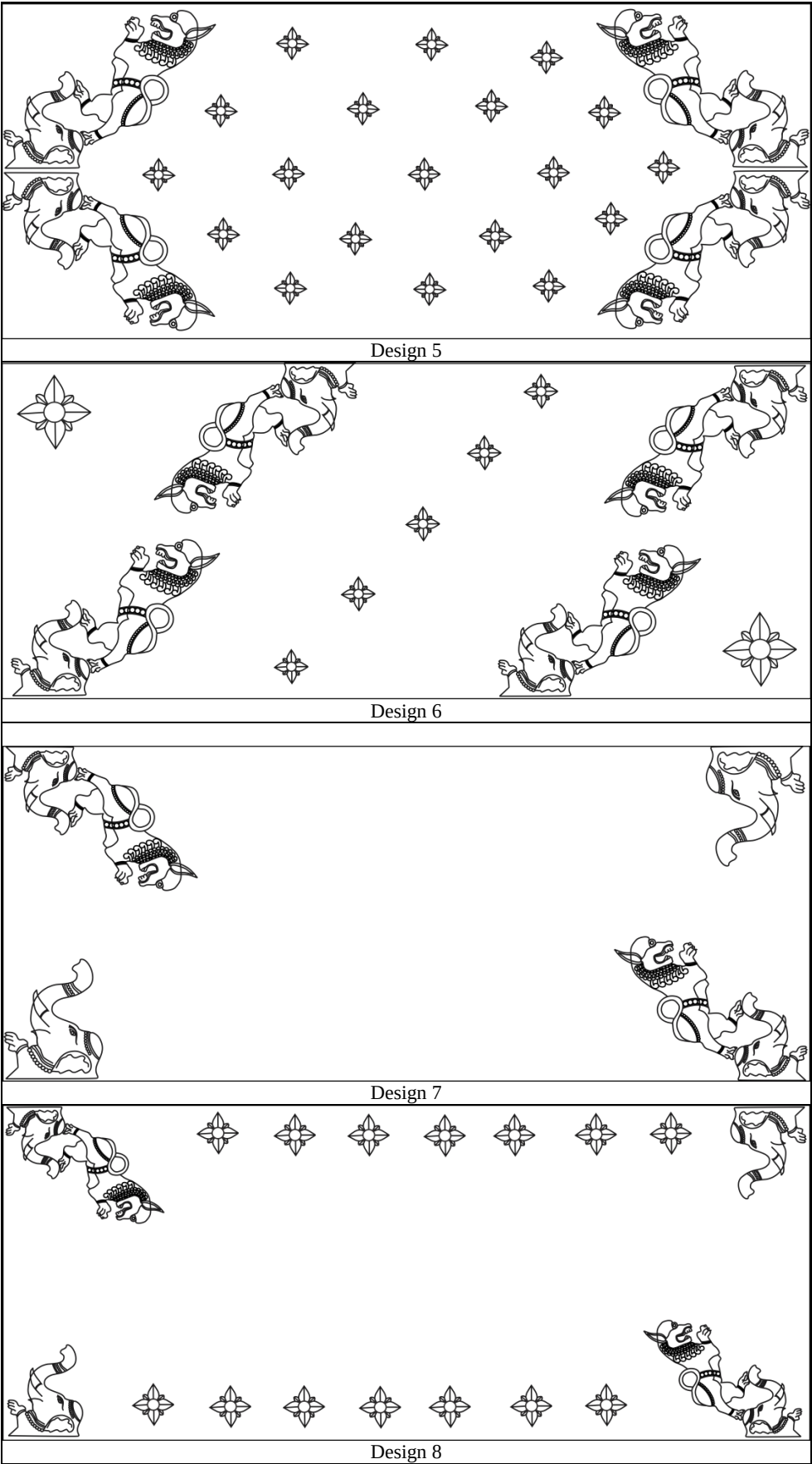
good, two being fair and one representing poor. A panel of thirty members assessed the developed designs. Weighted mean scores were calculated from the subjective evaluation

for all eight designs according to the suitability for product development. Finally, a top-ranked design layout was selected for final product development.

Table 3: Developed design layouts


Design 1

Design 2

Design 3

Design 4



Out of the eight developed design layouts, Design 5 was selected for final product development based on its superior evaluation outcome. The evaluation criteria included the selection and combination of motifs, design placement, and

overall visual appeal. A five-point rating scale was used, where 5 indicated excellent, 4 Very Good, 3 Good, 2 Fair, and 1 Poor. A panel comprising thirty evaluators assessed all eight designs using this scale. The data collected through

subjective assessment was used to calculate the Weighted Mean Scores (WMS) for each design. Among the evaluated layouts, Design 5 achieved the highest WMS of 4.34, indicating its strong performance across all evaluation parameters.

The results suggest that Design 5 was perceived as the most aesthetically pleasing and contextually appropriate for product development. Its high rating reflects effective motif integration, balanced design composition, and overall harmony key factors in successful textile design. Consequently, Design 5 was selected for further development and application to the final product, based on its top-ranking evaluation.

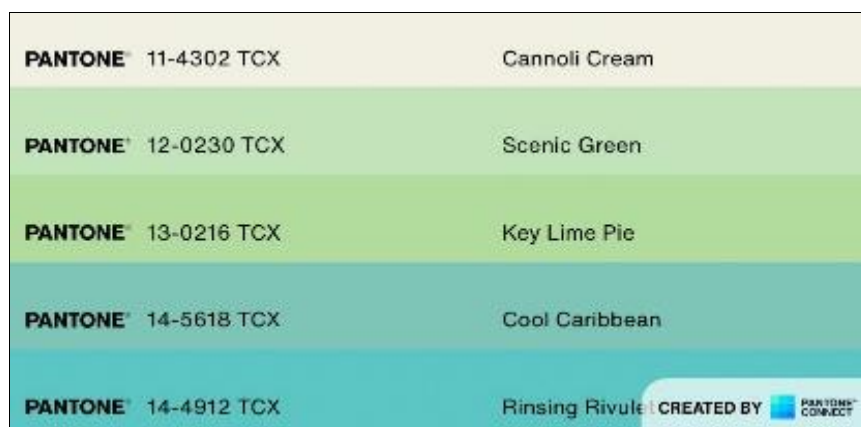
Table 2: Selection of textile design layouts

Design No	WMS	Rank
1.	3.86	V
2.	3.90	IV
3.	4.23	II
4.	3.86	VI
5.	4.34	I
6.	4.03	III
7.	3.72	VIII
8.	3.83	VII

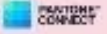
Colour combinations

Cannoli cream Pantone 11-4302 TCX is a light shade of the colour of the year 2025, it plays a significant role in Pantone's 2025 colour palettes. Specifically, it is featured in the "Relaxed Elegance" palette, complementing Mocha Mousse and other shades like Chanterelle and Chocolate Martini. This inclusion underscores Cannoli Cream's versatility and its appeal in creating sophisticated, harmonious designs.

For the development of hand-painted dupatta, selected Cannoli Cream as the background colour. Cannoli Cream is a soft, warm off-white shade that carries subtle undertones of beige and ivory, evoking an understated elegance and timeless sophistication. Its neutral, creamy base provides a harmonious canvas that enhances the visibility and vibrancy of intricate hand-painted motifs, without overpowering them. The choice of Cannoli Cream allows for a balanced interplay between tradition and modernity, making it suitable for both classic and contemporary design sensibilities. Additionally, its muted warmth complements a variety of colour palettes, making it versatile for integrating temple-inspired motifs, which often feature rich, earthy, and jewel-toned hues. The serene and inviting character of Cannoli Cream also aligns with the aesthetic values of handcrafted textile traditions, supporting the overall visual and tactile appeal of the dupatta.

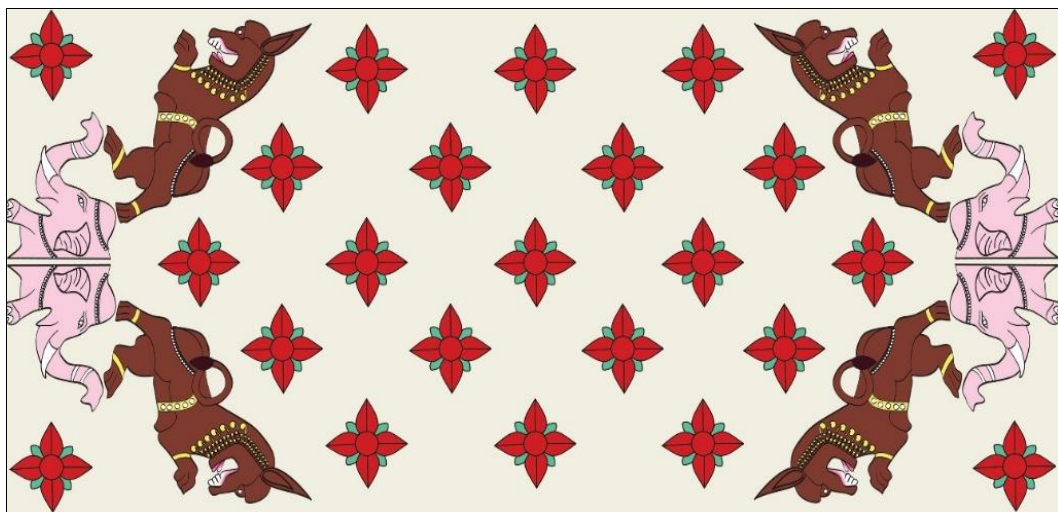


PANTONE® 11-4302 TCX	Cannoli Cream
PANTONE® 19-0503 TCX	Bitumen
PANTONE® 17-4017 TCX	Abalone Shell
PANTONE® 14-0440 TCX	Large Leafed Lime
PANTONE® 15-1910 TCX	Rosy Future

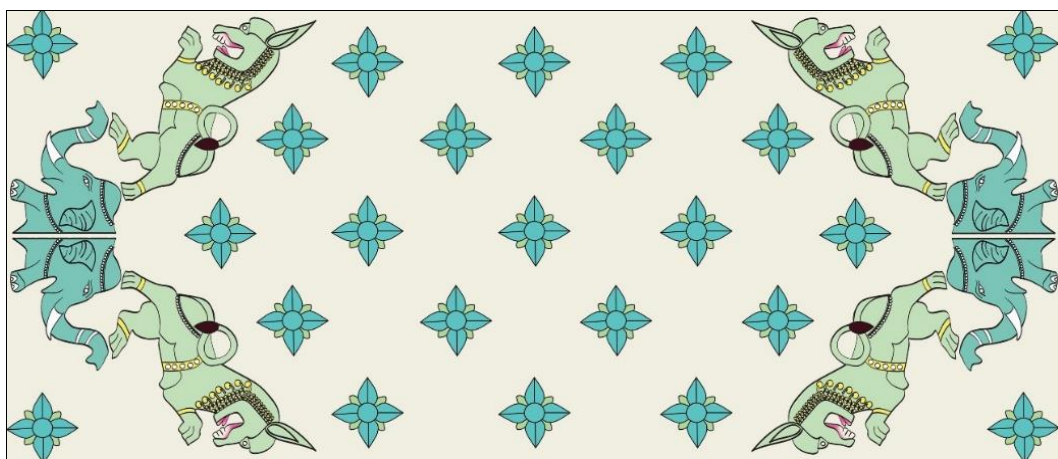
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For the selected design layout three colour combinations were prepared with the selected background colour Cannoli Cream. These colour combinations were developed in photoshop software. From the three colour combinations,

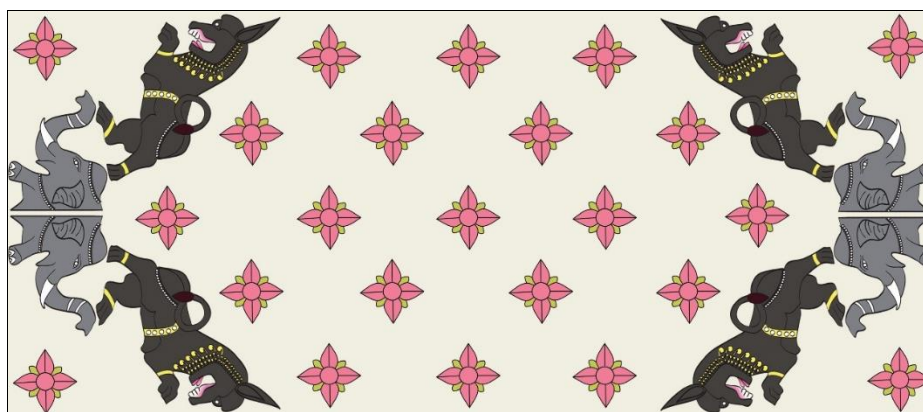
combination 3 was selected. The selected colour combination was used for development of dupatta using hand painting technique.



Colour Combination 1



Colour Combination 2



Colour Combination 3

Hand painting technique

Hand painting on fabric is a technique where paints or dyes are directly applied onto textiles using brushes or other tools to create freehand designs. It allows for intricate, personalized patterns, making it ideal for artistic expression on apparel. Natural fabrics like cotton and silk are commonly used, along with special fabric paints that remain flexible and washable. After painting, heat-setting ensures the colours are fixed and durable. This technique is especially suited for detailed motifs, such as temple-inspired designs, due to its precision and versatility. By using hand painting technique dupatta was developed with acrylic paints. The developed dupattas were analysed for studying the consumer acceptance. The designs were well received by adolescent, college going and working women. The consumers were happy with the designs and were accepting the designed dupattas for regular, occasional or partywear.

Conclusion

The findings indicate that the hand-painted dupattas with motifs adapted from the Ramappa Temple, has been well received by consumers. The artistic yet straightforward designs of the dupatta, along with its durability and variety, makes it widely accessible to customers. As a result, these designs can be commercialized and offered to a broad audience through hand painting, screen printing, block and digital printing, etc. In today's world, this method of adaptation of traditional architectural designs not only preserve artistic traditions but also helps in maintaining developed products as valuable cultural assets. It provides a strong foundation for future work in sustainable textile design using both indigenous art and digital tools and techniques as per customer demand.

Acknowledgement

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