



A STUDY ON USE OF ADVANCE WEAVING TECHNIQUES TO CREATE EFFICIENT ENTREPRENEUR IN TEXTILE DESIGNING

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An **Entrepreneur** is someone who organizes, manages, and assumes the risks of a business or enterprise. **Entrepreneurship** is the act and art of being an entrepreneur or one who undertakes innovations or introducing new things. These new things can be any of the start-ups. The most obvious form of entrepreneurship is of starting new business (any). First of all, being an entrepreneur you learn basic skills like time management, creativity enhancement, passion, strategy planning, etc. It certainly helps developing strong technology skills or expertise in a key area. You develop the ability to keep going in the face of hardship. By studying Entrepreneurship and Innovation in college you can understand and adapt change, because change is at the very core of Entrepreneurship. You develop the ability to think and then do **big**.

Introduction of computer aided textile designing through adoption of modern design & colour combinations is making the textile fabrics more attractive and competitive to meet the rapid changing mood of the consumers for fashionable designs both nationally as also internationally. This state of the art CAD tool is currently being employed for the manufacture of exportable textile products including apparels furnishing fabrics upholsteries blankets carpets and so on and has been showing a higher potentiality of revenue generation from export market. Textile industry witnessed not only a tremendous modernization in technology and computer science in massive scale to unleash the creativity of the textile designers.

Technology is being used more and more in textile industry (both power loom and handloom in today's world computer aided textile designing (CATD) becomes versatile for all the designing and weaving industry. The computer aided textile designing is directly useful for fully automatic and semi-automatic electronic latching machines jacquard industry. Finally it is also useful for raking graph print out which can be used to punch cards using manual punching machine. Computer aided textile design is becoming more and more famous with every passing day due to its wonderful offerings.

Textile Software:

The usefulness of CAD has specific software for different aspects of textile and apparel manufacturing if there are software for designing footwear caps and bags there are pattern making software for fashion industry. There are solutions for seen goods industry as well as system for the design of jacquard Woven fabrics. The garment pattern designs precision cutting system cutting and plotting system pattern designs grading and marker making you name it and there is a software for every textile related work this is its revolution in textile industry. CAD is virtually a no limit solution for textile designing and manufacturing because it has enormous application area. With the introduction of computer aided designing and computer aided manufacturing technology it is possible to make modern designs and unique colour combinations which can easily satisfy the consumers need. Now the fabrics are more attractive and more complete in today's rapid changing fashion world. High quality exportable textile products including

approvals furnishing fabrics upholsteries, blankets, carpets and so on are made with help of CAD system showing higher potentiality of revenue generation from export market.

Computer aided design technology allows the creativity of the textiles designers to run free; hence it is being used more and more in textile industry. CAD is heavily used in textile industry as a designing medium as well as a tool for production. In power loom sector of our country almost every composite textile mill has adopted this type of CAD tools for textile designing & manufacturing in their R & D lab. The software is so efficient that it produces all the required outputs within a few seconds and allow the craft man show more and more creativity. CAD is the contraction which stands for computer aided design/computer aided manufacturing this term means different things to different people involved in designing manufacturing and mechanical engineering.

Weaving:

At this point the thread is woven depending on the era, one person could manage anywhere from 3 to 100 machines. In the mid nineteenth century four was the standard number. A skilled weaver in 1925 would run & Lancashire looms. As time progressed new mechanism were added that stopped the loom any time something went wrong. The mechanism checked for such things as a broken warp thread, broken weft thread, the shuttle was empty. Forty of these Northrop looms or automatic looms could be operated by one skilled worker.

THE THREE PRIMARY MOVEMENTS OF A LOOM ARE SHEDDING, PICKING AND BEATING UP

Shedding: The operation of dividing the warp into two lines.

Picking: The operation of projecting the shuttle from side to side of the loom through the division in the warp threads. This is done by over pick is suitable for quick running looms.

Beating -up: The third primary movement of the loom when making cloth and is the action of the reed as it drives each pick of weft to the fell of the cloth.

Types of Weave: By changing how weft and warp threads interface you can create different kinds of weaves. Plain Weave, Twill Weave, Vertical Zig -Zag Weave, crepe Weave, Diamond Weave .

Future Trends: Like all manufacturing and design areas, the textile industry to have profited a great deal from CAD. Better efficiency and more importantly memory strong for future use are great benefits. It is quite beyond any doubt that in times to come, several other path-breaking modifications like better target matching and reduced time frames would be achieved by computerized packages. Technology has only grown over the ages and has sacked in diverse fields into this hold. Textiles and fashion are no exceptions and there are lots of promises still in store. A computer aided textile designing more than 200 tools & utility are used. Powerful editing tools, Any size of design creation is possible. Repeat arrangement is possible, No limitation on the number of colour in the repeat. Multiple colour combination are achieved. Option to use own shade library. Any kind of new weave creation. Searching of a particular colour is possible. Now design creation can be done easily.

Scope Of Dobby Shedding Machines:

When a patterns is beyond the range of a tappet either. In the number of shafts to be manipulated or in the pick to repeat of the pattern and is at the same item too small to be economically produced by a jacquard. A machine is a employed which is known as a dobbie. The number of shafts it may be called upon to actuate varies between 6to40.

Locale of Study: The study was carried out MGIRI (Mahatma Gandhi Institute Of Rural Industrialization) Wardha, Department of Textile and Clothing Yeshawant Mahavidyalaya Wardha.

Selection of Sample: For this study the yarn sample was selected from MGIRI

Wardha .The selected yarn was longer which results to produce sizing of cotton yarn. Total 10 hanks of 405 count were selected to produce simple and novelty weave fabric for the study. The samples of plain weave. Twill weave vertical zig-zag weave crepe weave diamond wave of different colour combinations were made.

Research Tools and Materials:For the study the tools used were 40s counts cotton yarn, Charkha for spinning yarn, bobbins, Shuttle, Swift, Wooden warping frame handloom, Latish-peg, Dobby attachment. Computer software & net graphics, Easy mapping and coral draw used in prepare this technical sheet. graph paper, pencil, scale, measuring tep.

Computer Aided Textile Design And Net Graphics: As well as being part of the Fashion Studio suite Easy Weave is also one of a series of three products aimed at the Fashion and Textile industries for creating Dobby pattern fabrics. Easy Weave is the most intuitive of the Net Graphics Dobby applications aimed at designers who want to be able to create Dobby Fabrics which are reproducible in production but who may not have access to all the necessary production and machine information available at the early creative design stage.

In Computerized Mode: Complex designs can be drawn with advanced features on the computers using free hand techniques within very short time periods. Database can be built on all such designs/manufacturing parameters, as weave pattern color libraries. The fabric is simulated by interfacing the warp and weft in the computer and the full visual impact of the design is available at call for use in any design. The computer generates all the manufacturing documents required to set the doobby loom or to punch the cards for jacquard looms.

Computerized Mode Over Manual Mode: Creation of new designs on the computer permits trial of a number of variations. Small design modules which have been earlier found effective can be positioned and pasted new designs to

create new patterns. It is possible to play around with colour shades motifs and other design variations and immediately use the total effect. Computerization can display on screen and reproduce on paper the total simulated fabric with complete warp and weft interfacing. All variation can be varied out and reassessment made without loss of time. If the customer requires any change in the design the same can be instantly carried out and displayed. There is no possibility of error while creating pattern from the design. With the CATD facility, the design process duration can be shortened to a few hours. The use of computers in designing in the long run will be a necessity, especially for the export market. With the CATD facility, it is possible to transmit designs to remote locations with the total integrity.

Loom Get Up In Manual Mode: The designs are either drawn or printed on paper and demands printing expertise. The fall weaving scheme is worked on paper, which includes the interlacing pattern of the warp and weft. This serves as a manufacturing document to set a doobby loom or punch the jacquard cards. The visual impact of the whole fabric is available only after the sample fabric is made. The process of evolving a pattern from the design is tedious time consuming and amenable to errors.

SYSTEM OF PEGGING & WORKING

Dobby for Heddle Shaft Control: Draw the design in the point paper ,Prepare the drafting plan, Prepare the peg plan from drafting plan, Can not the heddles with the doobby lever as per the draft order prepared.

Lattice Preparation: Take the repaired number of lattices as planned in peg plan. Read the first pick and it the log in the respective hole of lattice for end up/heddle up. Repeat the process for each pick till the completion of all the picks. Now join the pegged lattices so as to from a circular chain. Mount this lattice chain on the doobby.

RESULT AND DISCUSSION**RESULT:**

Result in this research the CATD sample & Dobby handloom sample designing. The samples were made for shirting. The following table was made by keeping the following point in mind by visual analysis given to the people. The points are texture

of the fabric. CATD & Dobby loom woven structure the plain weave, twill weave, vertical zig-zag weave, crepe weave & Diamond weave. Rating of respondents regarding colour combination, design, texture & overall appearance of the woven.

TABLE**Rating of Respondents Regarding Colour Combination of the Woven Sample**

CATD Sample						Dobby loom Sample				
Sr No.	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Excellent	80%	60%	56%	50%	84%	60%	40%	48%	83%	36%
Very good	20%	40%	40%	34%	16%	40%	34%	40%	17%	44%
Good			41%				26%	12%		20%
Satisfy										
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Form the above table it is confirmed that the CATD sample5 has received 84% excellent and doobby sample 4 has received 83% excellent. CATD sample1has received 80% excellent. CATD sample 2 & doobby sample-1 has received 60% excellent. CATD sample-3 has received 56% excellent. CATD sample-4 has received 50% excellent doobby loom sample-3 has received 48%& sample 5 36% excellent. The doobby sample 5 has received 44% very good. The sample CATD 1,2,3& doobby sample 1,3 has received 40% very good respectively. CATD sample 4 & doobby sample2 received 34%very good. CATD sample received 20% very good. The sample doobby -2 26% sample 5 20, sample 3 12% has received good. The sample CATD 4 has received 16% good and the sample 3 has received 4% good.

SUMMARY AND CONCLUSION

In this research the computer aided textile designing and doobby loom woven structure was made atCATD Dobby handloom. The cotton yarn were selected the research was carried out in Yashwant Mahavidyalaya wardhaand MIGRI

(Mahatma Gandhi Institute of Rural Industrialization) Wardha.

The tools and materials used for this weaving sample were as follows 40s count, cotton yarn, charkha, bobbin and swift handloom and parameters and selected yarn from MIGRI Wardha. The sample were used only for suiting & shirting different types of weave done on it Plain weave, Twill weave, Vertical Zig-Zag, Crepe weave, Diamond weave sample required for design. Time required is one weak maximum time & money for weaving process required. In this research the computer aided design very sparking seen. The different colour combinations for this. CATD weave prepare very fast colour combination change in weave colour in this research the work was done according to texture, design, colour combination and overall appearance sample.

CATD and doobby loom now rating of respondents regarding colour combinations of the woven according to colour combination of the fabric the CATD sample 5 received 84% excellent. The

sample Dobby 4 has received 83% excellent CATD sample 1 has received 80% excellent CATD sample 2 & Dobby sample 1 has received 60% excellent,. Therefore it is confirmed that the everybody liked the fabric colour combination.

CONCLUSION: From the study it is clear that researcher prepared samples based of Plain weave , Twill weave , Vertical Zig-Zag weave, Crepe weave ,Diamond weave. All these samples are very good. CAD takes less time to prepare samples as compaired to designing on handloom. This knowledge designer can use to create many designs on computer and use to make woven material and become a very good entrepreneur in the field of Textile Designing.

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