

A Study of Developing Skill Matrix System for Ready Made Garments Industries of Bangladesh

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Abstract

The soul of this industry is its skillful workers and to determine the workers areas of skill and efficiency an effective visual tool is used in the industry known as Skill matrix. Skill matrix is basically a visual tool that shows the tasks and skills required for specific roles and the current competency and skill level of each employee for each task. In Bangladesh, specific skill matrix system is absence. Few garments factory practice their own method to evaluate the workers and staff. Because of this reasons most of the miscommunication has occurred in this RMG factories as a results industrial violence concurred. In this project, the research team collected data's of different garment factories skill matrix and have compared the methods of gathering these data also gathered the assessment or grading system of these factories and determined critical points and criteria and Performances on which basis an employee/workers salary, promotion is evaluated. After analysis those critical points the research team proposed a new skill matrix evaluating system for RMG industry of Bangladesh. This system will reduce the miscommunication with labor and factory owner ultimately will reduce the factory violence.

Keywords: Skill matrix • RMG • Worker • Unrest • Labor • SMV • Efficiency

Introduction

Skill matrix is a tool or software used in the industry or others work place to identify the skills that a team will need to complete a project successfully. This matrix makes lists of skills that team members already possess as well as skills that need to be developed. Skill matrix provides an overview of an organization's, or team's skills base, assisting with the management, control, and monitoring of competency levels. Skill matrix is very considerable element because when it is set up well it can help you establish one's teams easily, identifying any skill sets that one needs based on the project requirements. A good skill matrix helps one to complete project efficiently and to choose the most qualified and skilled team members. Skill matrix ensure benefit for Both industry and workers. For example a skills matrix enables managers/business owners to understand the potential skills, strengths and weaknesses of the employees. This also helps project managers to assign the right work or job responsibility according to their skills, interests or capacities. On the others hand it ensures proper job and wages of worker according to skill.

Our researches is done for study and improve skill matrix system, Because in our country workers do not get adequate wages and promotion for lack of proper assessment and evaluation, as a result worker unrest occurs frequently. Labor unrest is a term used by employers or those generally in the business community to describe organizing and strike actions undertaken by labor unions, especially where labor conflict become violent or where industrial actions in which members of a workforce obstruct the normal process of business and generate industrial unrest are essayed. The most common reasons for labor unrest, as alleged by workers, are non-payment or deferred payment of wages. Despite their claims to the contrary, some garment owners neither give salaries, nor overtime allowances to the workers on time. Small

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wonder a kind of mistrust between the employers and employees exists in this sector. The core problem behind this unrest is the lack of intra-organizational relationship. Any healthy working environment involves openness and transparency. When employees consistently deliver, but receive little or no appreciation, it is very easy for them to become disheartened, frustrated, and apathetic about their job, which decreases productivity and causes unrest. Labor Unrest in RMG sector of Bangladesh has been a common phenomenon. Workers are being embroiled in clashes frequently; they call strikes often to make their demand home. It causes enormous loss to the owners, cripples the economy and tarnishes the image of the country aboard. It also makes foreign buyers reluctant to render future orders. In addition the industry is losing competitive edge for this. In July 2009, due to massive labor unrest, Hakeem Group, a leading garment manufacturing factory incurred a loss of around 100 core taka and two workers died with resultant loss of 2000 jobs [1].

We have also done this project to analyse different types of skill matrix method and grading method used in the garments factories. We have also done this research to know which Bangladeshi Textile industry uses skill matrix and we have also analysed different skill matrix software to determine shortcomings in them as well to suggest few improvements since there are not any specific skill matrix software just for the garment industry [2]. The main problems circle around worker unrest, worker discrimination and lack of transparency in worker evaluation, grading and wage/promotion/demotion determination. A garment-worker is a person who makes garments. There are now 4,825 garment factories in Bangladesh employing over four million people. 80% of garment workers are female 2% are male workers [3]. In this large sector worker unrest is a common phenomenon. Whether the unrest results to violence or not, there remains intra-organizational unrest due to mainly lack of proper evaluation and wage distribution. Other than that, the main causes of labour unrest include lack of minimum facility and safety at work, improper grading and evaluation, sub-standard living conditions, deferred payment of wages and benefits, international conspiracy and coercive role of the law enforcing agency, too much dependency on buyers, pressures from the workers and local terrorists, use of workers by others and rumours, un-fulfilment of education demands of their children, distorted minded workers, political instability of the country, too much workload, lack of promotion opportunity, insufficient wages to survive etc.

These things hamper the productivity and efficiency resulting in loss, late shipment, and buyer order cancelation. Adding to this, the skill matrix systems that are practiced in the industry are mostly analogue and not fit to this modern era of high productivity. 'time is money' in this sector and huge valuable time is lost in finding the proper worker for proper job, finding every details of a worker

cause they are not stored orderly in one specific side rather scattered here and there. Refereeing to skill matrix software, one particular point has to be said that there are none specific skill matrix software for the garment industries. Very few garment industries uses skill matrix software for evaluation [4,5].

Research

Objective

Rational objective: The main objective of this project is to determine the key facts running around worker unrest that directly or partially links to skill matrix and ways to improve the existing system to evaluate, grade workers to build transparency and credibility among management and workers. Adding to this, the goal is to seek out the shortcomings and propose adequate addition in existing skill matrix system to provide new idea to build specific skill matrix software for the garment industry of Bangladesh.

Specific objective:

- To do Analysis about skill matrix system.
- To deliver ideas to improve skill matrix system.
- For determination of key reason of worker unrest.
- To analyse existing skill matrix system and suggest improvising to make it suitable for the RMG sector
- For ensuring better working environment with the help of proper evaluation.

Experimental methods

Materials: Labor, Internet, blog, journal, govt. website, data survey report.

Operational feasibility: In this project the authors analysed the existing method of skill matrix. The authors have studied about the software based skill matrix system. After analysing proposed, some adding/moderating the exiting skill matrix system.

Technical feasibility: In this project first of all collected basic theoretical data about skill matrix from book and internet, for example how to make skill matrix system, different factor related with skill matrix and how proper skill matrix system can increase transparency in in worker evaluation for which

lacks, worker unrest occurs. Then collect practical data from some factory which uses skill matrix. The authors also asked different question to workers by taking permission from the management about their evaluation by means of questionnaires. Staffs such as IE, HR were also involved. We came to know about real methods of grading and creating skill matrix we collected different data about worker which are used in skill matrix sheet.

Software: Actually maximum Bangladeshi factory does not use special skill matrix software they used Microsoft Excel. We discuss about different software of skill matrix. We Collect Software data from different website.

Research methodology: At first, the authors analyse the existing system and grading. Then tried to find link of worker unrest to non-transparent evaluation. After this find out the gaps in existing skill matrix Software to improvise them to be fit to the needs of the RMG sector. While doing these, this research also highlights the benefits of using skill matrix software against analogue method. At the end, we propose a strategic pathway which will link eradication of worker unrest by using of adequate method or software, which will ultimately benefit the RMG sector of Bangladesh.

Analytical analysis: In this research the author compared among manual skill matrix, semi-automatic and automatic skill matrix system. We also determine benefit and drawback of every system. This r research also discuss that how to improve skill matrix software and working method.

Results and Discussion

After getting the face to face interview of the labor, staff, admin officers of 25 garments factories the authors summarized the following data for clear understanding. The Table 1 shows the main features of manual skill matrix system of the traditional garments factories of Bangladesh. In the following Table 2 shows the results of 25 factories interview. The following Table 3 shows the general features of the auto skill matrix software already practiced by few garments factories of Bangladesh. After getting all the results from 25 garments factories of Bangladesh and from used available apps in Google play store and markets the authors tries to propose new skill matrix evolution software or apps for garments factories of Bangladesh. The concept of these apps has created by the research team and software is developing by the Information and communication expert. At first, the research team has tried to summarize the proposed features of the software in Table 4.

Table 1. Features of Manual Skill Matrix.

Criteria	General Features
Productivity	Productivity is not good because this system is time consuming and backdated. This system also not give proper feedback as a result productivity is hamper by worker
Access points	Anyone can be access in this system. As a result privacy is not good. Top level and Mid level management cannot get access at any time.
Availability	This system is available. Anyone can be using this system.
User friendly	This system is user Friendly for some people but not for everyone because this system is appropriate for backdated people whose are not skilled on using computer. Others hand this system is boring and time consuming for skilled People.
Grading policy gap	In manual skill matrix Grading is divided into five classes. For example no competence, low competence, low competence, High competence, Expert. In this system grading policy is very poor, because this grading system is not subtle.
Promotion policy gap	Promotion policy is not fair and accurate. Because this process can be possible corruption by employees. Plus accuracy is low determining best workers .
Sacking policy gap	Sacking policy is not fair.

Table 2. Factories that use manual skill matrix system.

Criteria	Impact and Results Based on Criteria
Productivity	In this system primary data are input manually then software given output by calculation of inputted data. If we judge this system accordance with productivity we see that Productivity is very good because its reduce consuming time. This is one of the important successes.
Access points	According to Access point this system is very secured and smart system, Because any one cannot open the file. Mid level and top level management take access by receiving email from IE department.
Data Update system	Manually
According to data Grading policy gap	Grading systems is classified in different class for example A, B, C, D.Grading systems are done based on different skill and accuracies.
According to grading Promotion policy	Totally not fair for the reason of manual data import.
According to record Sacking policy gap	Sacking policy is slightly fair but not totally fair because ratting can be change because primary data are imported by Employees of computer section.

Table 3. Features of auto skill matrix.

Criteria	General features
Productivity	If we judge this system accordance with productivity we see that Productivity of software is very high because in this system every task done automatically as a result required less time and give accurate skill radding. This system motive the labor by given flawless report as a result employees gives their best attention to improve own skill and increase production. This software done its job efficiently.
Access points	According to Access point this system is the best, secured and smart system, Because any one cannot access in the skill matrix file without account and pin number and only specific group of people can be access these file. There is no risk to losses of file and file can be recovered from server.
Data Update system	Manual and automatic both input can be perform.
According to data Grading policy	According to data grading policy it is best system Because this system gives accurate radding report and provides promotion to eligible person.
According to grading Promotion policy	According to data grading policy it is best system Because this system gives accurate radding report and provides promotion to eligible person.

Table 4. Features of proposed software.

Criteria	Modified Features
Productivity	This software helps to increase productivity.
Access points	According to designation every person whose are related with factory can access this software. According to designation every member have limitations to access this software.
Data Update system	Manual and automatic both can be practiced. For automatic update should be attach different device for example attendance device and sensor.
According to data Grading policy	In this software data grading policy is fair. Because access of this software is limited and calculation is done Automatically.
According to grading Promotion policy	In this software data grading promotion policy is fair. Because access of this software is limited and calculation is done Automatically. Promotion is done accordance with software Radding.
According to record Sacking policy.	Sacking policy is fair Because all data are entries in software.

This is the initial page that contains all the main section of the software such as profile (worker/staff), efficiency, worker database, download centre. From here authorizes personnel can log in as well can change settings if permission is given (Figures 1-3). Here the full details of the worker are shown along with grade and salary. Worker him/herself can view it and authorized personnel can use it as he/she needs. The Figure 4 also defines monthly attendance and performance of the labor. This is also a part of the worker profile that denotes the individual's performance according to Machine Processes. This can be used to determine a worker's efficiency (Figures 5 and 6).

Data entry

This site is only authorized to respective personal of specific departments. Here data is given input in terms of attendance, production, worker info, staff info, correction to any previous given data. The attendance is attained through punch machines which are connected to the software server. Annual can be given in special cases (miss/new/technical error) by authorized personnel.

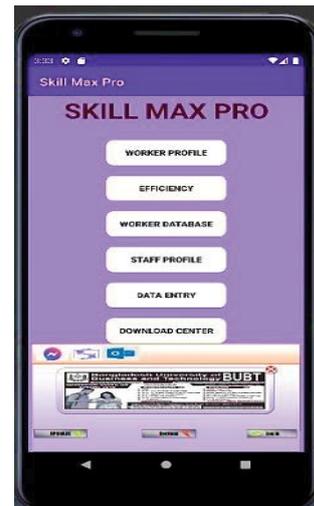


Figure 2. Homepage of proposed automatic software.

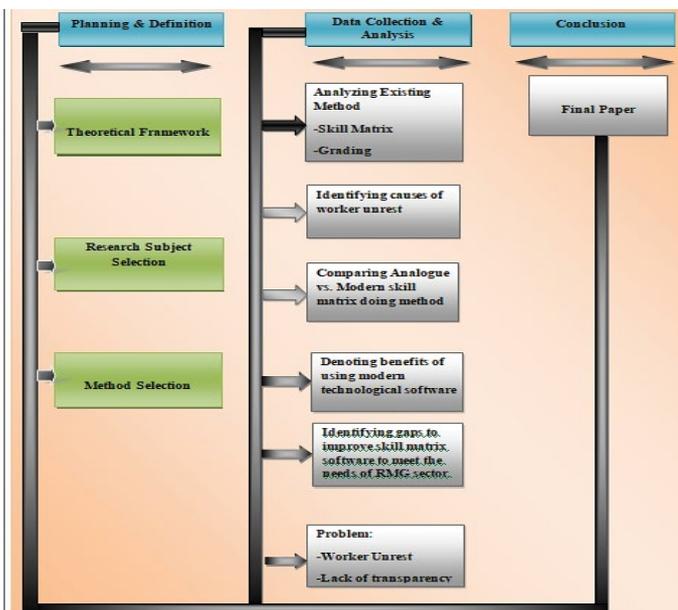


Figure 1. Methodological framework of this research.



Figure 3. Worker profile page 3 and 4.



Figure 4. Search option for the labor.

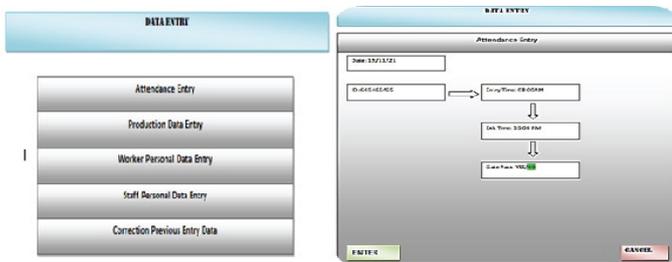


Figure 5. Data Entry pages of this proposed software.



Figure 6. Correction pages.

Correction to previous entry data Here the data is update weekly/regularly and monthly as per worker's performance. This is given by IE after examine the worker.

Conclusion

Bangladesh is garments leading County. 80.7% of the total export earnings in exports and 12.36% of the GDP come from textile sector. Skill matrix is very important part of Garments industry. A skills matrix is a tool used in the workplace to identify the skills that a team will need to complete a project successfully. This matrix may list skills that team members already possess as well as skills that need to be developing. In this project we worked to improve skill matrix process. In this project we analyses different part of skill matrix and find out benefit and drawback of different kind of skill matrix. In this project we try to improve skill matrix and we suggest a new software idea of skill matrix. We are hopeful that if we implement this software we can create a history in textile industry. If we get more facilities and funding we can implement this software. These types of research are very important to improve our textile sector.

Recommendation for Future Study

This study is very complicated. The author has worked for the betterment of skill matrix system. The author tried best to improve skill matrix system for this reason designed new skill matrix software which links the gap between workers –IE-HR-Management. But this has some limitations. Such as lack of intention to update among the management-body in most of the garments, lack of funding etc. If the author get adequate funding they can implement this software. The author can also increase the function of this software such as upgrade this software to be used to find out total factory efficiency and Update of other efficiency.

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