

Correlation of the Attributes of the New Credit Union Development Model in Bangladesh

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ABSTRACT---- *This transformational study is the first investigative scientific research that supports and encourages credit unions (CUs) in Bangladesh to adopt a New Credit Union Development Model (NCUDM). Aimed to determine the relationship, effect of business management performance (BMP) and business environment performance (BEP) of NCUDM, this study employed researcher-made questionnaires of 66 items with 10 sections to gather needed data from 450 stakeholders in the Cooperative Credit Union League of Bangladesh Limited. It also employed focus group discussions (FGDs), and in-depth interviews and expert panels. Its secondary data covered the period 2007 to 2014. Pearson correlation coefficient statistics was computed to assess the relationship and strength of a linear association between the variables of BMP and BEP. Structural Equation Modeling (SEM) was utilized to posit better estimates of the effect of BMP on BEP. Coefficient of correlation (r) results show nine important NCUDM variables that are significantly related ($p < .01$) and twelve components that are important to CUs in Bangladesh that are significantly related ($p < .01$, $p < .05$). SEM output model shows significant effect in BMP and in BEP using the chi-square (χ^2 $M=245.62$, $p < .01$, $df = 120$) indicating appropriate well-fit model, favorable and accepted data. Results yielded a robust and significant contribution to transform CUs in Bangladesh utilizing a new paradigm.*

Keywords---- business management performance, business environment performance, transformation, new credit union development model, new credit union paradigm

1. INTRODUCTION

Credit union (CU) is 'an association of persons' where members belong to a common bond (associational, occupational or residential). Common bond is the cornerstone of success in the business operation of CUs. It serves as social pressure and lessens the risk of financial management, especially loan-defaults.

Members of CUs know each other; they share **cooperative values** – self-help, self-responsibility, democracy, equity and solidarity; **ethical values**– fairness, respect, responsibility, caring and honesty; **religious values** – trustworthiness, equality, unity and accept unserved/underserved; and, **common purposes** – community building, working together for everyone's benefits and reduced financial suffering and plight. CUs raise funds from members through variety of savings and loan products and where human and social values protect funds (Donnelly, 2004; Fuller and Jonas, 2002).

Franz Hermann Schulze-Delitzsch began urban CU in 1852 in England, while Friedrich Wilhelm Raiffeisen founded the first rural CU in Germany in 1864. In Bangladesh, the CU movement started in 1955. The first CU established in Bangladesh was 'The Christian Cooperative Credit Union Limited, Dhaka' (best known as 'Dhaka Credit'). This is found within the urban Catholic Christian community in the Capital City of Dhaka. Rev. Fr. Charles. J. Young, CSC, is the father of CUs, while Most Rev. Lawrence Leo Graner, CSC, is the visionary of CUs in Bangladesh. Part of the social and missionary responsibility of the Catholic Church is to encourage rural communities including Muslims, Hindus and Buddhists to participate in the CU movement; thus, spreading fast country-wide.

In 1979, Dhaka Credit established the National Federation of CUs in Bangladesh called, 'The Cooperatives Credit Unions League of Bangladesh Limited' (CCULBL). Presently, the total number of CUs in Bangladesh is 720, thirty-three (33) of which are considered large in terms of assets and membership; 184 are medium and 503 are small (Gomes, 2012).

This research aims to emphasize some assumptions justifying the requirement of the present study. Traditionally, the policy of cooperative institutions is open-membership; however, in the modern context, the policy is limited-membership and focuses on business (Zeuli and Cropp, 2004). The policy of traditional CUs in Bangladesh is close-membership and

limits the number of members based on particular identity, i.e., parish-based, community-based or employee-based, and focuses on social missions. On the other hand, the policy of the new generation CUs is open-membership, allowing anyone who wants to join.

The first principle of CU which is voluntary and open-membership welcomes anyone from the community to join under a common bond and aims to build community. Members know each other, thus, making it easy to mobilize community capital. The present concept of open-membership contrasts the ‘bond of association’ in that members of large CUs are scattered and unknown to each other. Moreover, operations are spread in several civil districts and they operate like commercial banks.

Raiffeisen stressed that CUs are ‘not-for-profit’ and ‘not-for-charity’ but for service. Loan charges are less and interest on savings are higher. He added that the capital of CUs is not only money but human and social and these generate financial strength and security (CCULB, Archives). Green and Haines (2002) call CU capital as ‘community capital’ which is composed of financial, human and social capitals. CUs mobilize community capitals to achieve goals.

CUs provide education to develop human capital (knowledge, skill, experience); generate financial returns on local financial capital (shares/savings) and help communities to overcome significant barrier to business development. If successful, the financial capital increases. Financial capital that is mobile utilizes social capital (trust, norms, relationships, reputation and bond); thus, social capital also increases. Human, financial and social capitals are interrelated; true financial capital is built upon social and human capital. Hence, education/training and information are essential ingredients in managing the business operations of CUs for an excellent performance. In-depth interviews and focus group discussions stress that with education/training and community development ‘community capital’ increases. When training/formation sessions are intended for marketing and publicity, it does not match fully with the CU principles.

Democratic member-control makes CU development process more complex than other business models and organizations. The degree of tension depends on wrong perception or partisan motive in democracy, diversity of members and complexity of business operation entity. Presently, CUs have social, religious and political characters besides operating financial activities. Social characters exist in multi-group-community-based CUs. They focus on business-like operation management. CUs with religious character rely on parish-based bond in local church or other religious bonds (Buddhist, Hindu) focused on social mission while political characters are visible in all CUs.

In Bangladesh, of the 723 CUs (including 213 associates), 105 are church-based, 386 are community-based (including Hindu and Buddhist community), 203 are employee-based and 29 are counted as other common bonds (CCULB, 2014). It means that under the principle of ‘one-person one-vote’, leaders manipulate members in partisan political motive during election at general assembly. It has more negative impact – raises members’ conflicts, increases counter-part CUs, breaks common bond, questions directors’ competency, fragile financial security and business performance, which are similar observations cited in various studies (Jones, 2009; Ryder, 2009; Donnelly, 2004).

The above assumptions are intended to justify the need for the present study. The goal of the study is to analysis the relationship and effect of the business management performance (BMP) and business environment performance (BEP) to scientifically support and encourage CUs in Bangladesh to adopt the NCUDM which has been already proven successful in other countries. Thus, a study of this nature becomes necessary. Specifically, the current study has the following three-fold objectives: **First**, to analyze the relationships of the variables– ideology, organization, human resources, operating environment, marketing, member savings, member credit, financial discipline and financial structure when used as attributes of the NCUDM in the process of transformation towards the new paradigm in Bangladesh; **second**, to analyze the relationship of the components of BEP in the new paradigm; and **third**, to find out the significant effect of credit unions’ BMP to BEP in the new paradigm.

2. NEW CREDIT UNION DEVELOPMENT MODEL (NCUDM)

David C. Richardson introduced the concept of NCUDM in Latin America to transform selected inefficient and vulnerable Guatemala CUs into effective and sound financial institutions. Paul A. Jones modified and applied NCUDM for British CUs. Traditional CU leaders argue that NCUDM focuses on economic reality and undermine social missions. In defense, the NCUDM thinkers opine that it achieves social purposes; however, CUs must succeed first in commercially-oriented management. The transformation process of CUs in the concept of NCUDM is well documented in various literature (Rogers, 2012; Jones, 2012, 2009, 2005, 2004, 2002; Ryder, 2009; Fuller and Mellor, 2008; Jones and Decker, 2007; Hoel, 2007; Goth et al., 2006; Donnelly, 2004; Branch and Cifuentes, 2001; Richardson, 2000b).

The Attributes of NCUDM

The present study recognizes nine key attributes of NCUDM as shown in Table 1. These are slightly modified in some fundamental areas to transform CUs to new paradigm which are innovated directly from research assessment and identified significant/important for transformation/change.

Table 1. Business Management: The Nine Attributes of the NCUDM

S N	Attributes	NCUDM Perspective
1	Ideology	Business-oriented ideology is a basic tenet of the NCUDM. Ideology explores four major components: mentality, attitude, approach and vision-mission. This New ideology is more innovative and growth-oriented towards fulfilling social goals.
2	Organization	Professional and commercial organization is central to its effective development. Organization explores nine major components: activity, policies, membership, service, image, products, technology, information and complaints procedure. Basic characteristics are specialization in financial activities, world standard, diverse income groups, use of modern IT and maintained corporate image.

3	Human Resource	Business-oriented culture has direct impact on performance of human resource. It requires employment of staff with huge financial knowledge and technical skills. Human resource explores six major components: governance, staffing, technical knowledge, business & financial experience, staff remuneration and staff turnover. CUs pay CEO/manager/administrator who are well-trained professionals and with diverse business & financial experience. They are volunteer board members.
4	Operating Environment	NCUDM requires modernization of procedure/process, regulation/legislation and relationship with agencies inside and outside the community to ensure high quality service & products according to members' needs and expectations. Operating environment explores four major components: legislation, regulation, external environment and goal achievement.
5	Marketing	Business-oriented CUs has two basic functions: marketing and innovation. Marketing strategy helps upgrade the image of institutions towards portraying professionalism and efficiency. Marketing explores six major components: premises, furniture & equipment, research, marketing plans, approach, and dress Code.
6	Member Savings	Savings is first priority and savings mobilization is at the heart of the NCUDM. Member savings explores five major components: service mobilization, interest on savings, savings policies, motivation and implementation.
7	Member Loan	Low income members are more attracted to the accessibility, convenience and flexibility of diverse loans. Member loan explores seven major components: administration, interest rates, credit analysis, credit checks, loan amounts, guarantees and loan risk.
8	Financial Discipline	The central and core aspect of the NCUDM is the new systematic approach to financial management and discipline using PEARLS standard. Financial discipline explores ten major components: accounting, financial report, financial indicators, delinquency ratio, bad debt provision, net income distribution, liquidity reserves, internal audit, external audit and strategy planning. ACCESS(A-one Competitive Choice for Excellence in Service and Soundness) standard analysis branding is for Asian CUs. Eighty seven (87) indicators more accurately guide the financial management and whole-organization paradigm (ACCU, 2014).
9	Financial Structure	Financial structure strengthens CUs in the process of transformation using PEARLS standard. Financial structure explores three major components: Financing, Capital Reserves, and Initial Investment. Asian CU movement has adopted ACCESS diagnosis/analysis brand (ACCU, 2014).

Business Environment Performance

A set of business principles and values guide CUs in business operation. The typical governance system links the seven core principles and traditional governance structure, as shown in Figure 1 making CUs different from other financial institutions. CUs have adopted seven principles that have been developed in years (in 1937, 1966 and most recently, 1995) (Rogers, 2012; WOCCU, 2007; Zeuli and Radel, 2005).

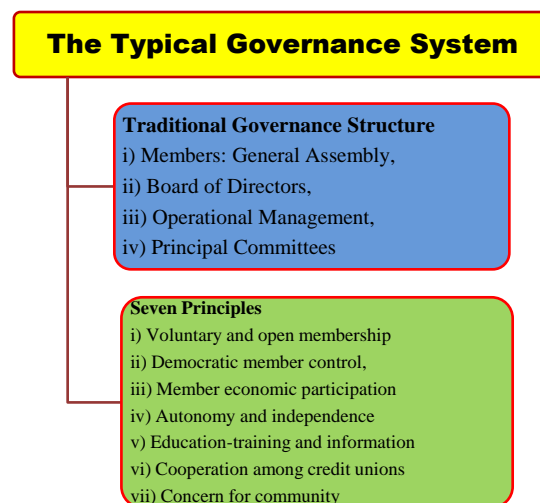


Figure 1. Typical Governance System of a CU

The first principle of CUs is to open its doors to everyone to join and participate in economic (3rd principle) self-development process. Its fifth principle is empowerment of local communities and mobilization of resources. By virtue of being locally developed (4th principle) members own and control (2nd principle) it. CUs clearly build community's human capital, social capital, and financial capital (7th principle) which Green and Haines (2002) call community capital. CUs develop human capital (education, skills and experience), utilize social capital (trust, norms, relationships, reputation and bond) and increase financial capital (member shares/savings) for the benefit of the community (Zeuli and Radel, 2005).

Figure 1 shows traditional governance structure with four elements. General assembly has the supreme authority with respect to CU business operations. Members elect or select Board of Directors and principal committees (Supervisory, Education and Audit Committees). The Board of Directors hires a manager/administrator/CEO to oversee the business operations in cooperation with the operational management team. Directors are liable and subject to the general membership. Based on the above business principles and values, the present research identified, as shown in Table 2, twelve basic components of business environment performance that are most important and competitive to CUs in Bangladesh (Validated through in-depth interviews, pre-research forum, FGD and EP).

Table 2. Twelve Basic Components of Business Environment in Bangladesh

S N	Twelve Components	Credit Union Perspective
1	Member-Relations	Based on economic foundation, members come together to practice strong common bond in a small community.
2	Community Building	Members come from diverse income groups and bond together to build a strong community.
3	Core Values	Human and social values protect capitals, especially member loans.
4	Change Awareness	Members have conscience-awareness agent that auto-pilot response to transformation/change.
5	Leadership Structure	Leaders manage CUs as a team practicing core principles for transformation.
6	Leadership Behavior	Everyone has a right to participate in management. Members practice rotating leadership behavior.
7	Democracy Practice	Financially-rich and poor members practice equality in terms of human rights through 'one member, one vote' principle.
8	Cooperative Values	CUs share common values – self-help, self-responsibility, democracy, equity, equality and solidarity.
9	Training/formation	Members have a right to know the whole-credit union paradigm clearly. CUs develop human capital, empower social capital and increase financial capital.
10	Financial Assistance	Members are united for financial service; together, members are strong enough to fulfill financial needs.
11	Member Satisfaction	As member-owned self-help financial institutions, CUs focus on members' needs.
12	Directors' Competency	Members have diverse financial and business experiences and have the enormous competence to lead CUs as self-help financial institutions.

3. NULL HYPOTHESES

Based on the extensive literature review on the variables and components to transform CUs to a new paradigm in Bangladesh, the present study is an attempt to address the following three null hypotheses:

- H1:** There are no significant correlations between the variables of the NMCUD in the new paradigm in Bangladesh.
- H2:** There are no significant correlations between the components of the business environment performances in the new paradigm in Bangladesh.
- H3:** There are no significant effects in business management performance to business environment performance in the new paradigm.

4. RESEARCH QUESTIONS

In order to realize the objectives, present study is guided by a group of research questions:

1. Are there significant relationships between the attributes of the NCUDM as a result of the shift to the new CU paradigm in Bangladesh?

2. Are there significant relationships between the components of business environment performance as a result of the shift to the new CU paradigm in Bangladesh?
3. Are there significant effects of credit unions' business management performances to business environment performances in the new paradigm in Bangladesh?

5. METHOD

Research Design

An integration of both **quantitative** and **qualitative** research techniques are used to conduct the research. For the quantitative approach, the study adopted the NCUDM applied in other countries by WOCCU as an instrument (Jones, 2002; Richardson, 2000b.) and employed researcher-made questionnaire composed of 66 items with 10 sections, expert panel (EP) and focus group discussion (FGD). This research conducted a pre-test to a group of 50 respondents to measure validity and reliability. For the qualitative approach, the research employed a pre-research forum with 30 experts, four FGD sessions (with 10 selected participants from each group, stratified, composed of board members, operating staff and members). As to the employment of FGD, the researcher consulted and depended on five professionals called the EP (expert panels). The FGD that were conducted utilized an in-depth one-hour and thirty-minute session. It was well-designed; reporting was done in writing. The research data were collected from CCULB and from registered member-CUs. Involved and engaged in the research process were volunteer boards, operational staff and external stakeholders. The research ensured significant and most useful descriptions, information and notes and data.

Data Collection

Stratified random sampling technique (SRST) was employed for both qualitative and quantitative research techniques. This is to determine the desired representation of the population and to ensure quality, reliability of data gathering, intensity of information, maximum variation, convenience, combination and purpose and flexibility. This is also to meet multiple interests and needs (Teddlie, 2007; Kemper et al., 2003). The SRST focuses on particular characteristics of a population who are interested in answering a questionnaire (Barrett, 2007).

This research followed a statistical tool that helps identify the impact of change in CU movement. This involved statistical and other important financial analysis of 510 CUs (large 30, medium 114, and small 175) registered with CCULB, the national federation. The research also employed online updated data & information collection. Four FGD sessions were conducted to explore expectations of CUs and strategic goals related to the survey results. Expert Panels (EP) were engaged as valid, reliable and independent research sample to determine the desired authentic representation of the population. The sampling technique was independent and accepted by the experts, federations, members and cooperative authorities. Corollary to this, the researcher utilized other effective and appropriate methods. The classification or type of credit unions that was recognized as a tool or basis to deepenthe usefulness of the research follows: large (mature), medium (transition) and small (nascent) (Gothet al., 2006). The researcher classified CUs in three groups based on the size of total assets to maintain uniformity with CCULB. Large or mature CUs have a capitalization of 500,000,001 or more; medium CUs have a capitalization between 10,000,001 to 500,000,000 inclusive; and, small CUs have a capitalization of less than or equal to 10, 000,000 (Figures in Bangladesh Currency: Taka).

Data Measures

Likert Scale (Summated scale) was used to measure the generated response to the survey questionnaire. Likertis a most widely used method of scaling in social sciences (Kline, 2011; Page-Bucci, 2007). The Likert Scale anchored on a six-point measure: **1=strongly disagree** (values:1.66 or Less), **2=moderately disagree** (values:1.67 to 2.50), **3=slightly disagree** (values:2.51 to 3.34), **4=slightly agree** (values:3.35 to 4.18), **5=moderately agree** (values:4.19 to 5.02); and, **6=strongly agree (Values:5.03 to 6.00)**. The result is favorable in terms of members' ability to reasonably discriminate between scale values (Kline, 2011). The same scale format creates uniform set of choices giving each participant ease of recall. All measures were adopted with a written consent. The questionnaire had clear instruction for participants answer.

Data analysis

Using SPSS version 20, Cronbach Alpha revealed the instrument's reliability and internal consistency of 89% and indicates the items measuring the constructs are reliable and internally consistent (Kline, 2011), where the margin of error is 5% and confidence interval level is 95%. A total of 450 respondents (156 from large, 163 from medium and 131 from small CUs) answered the questionnaire of 66 items with 10 sections to measure the relationship and the degree of the effect of the variables. A general rule of thumb for the present research is the requirement of a minimum sample size of no less than 200, where bigger is better (Kline, 2011; Lei, 2007).

Pearson product-moment correlation coefficient r statistic was computed to assess the relationship and strength of a linear association between the variables. Coefficient r of correlation is a symmetrical measure; it indicates strength and direction of the correlation coefficient, bigger r range is better. As a rule of thumb, the strength of the specific value

standardized between 0.00 and 0.30 is described as weak; values between 0.31 and 0.60 is described as moderate; and, values between 0.61 and 1.00 is described as strong (Frankfort-Nachmais, 2015; Healey, 2005).

Structural Equation Modeling (SEM) is used to posit better estimates of the effect of the attributes of NCUDM to the components of BEP, a general and powerful multivariate technique in social sciences. Also used is a specialized version of another analysis method. Absolute fit indices resolve how well a priori model fits the sample data and prove which proposed model has the most superior fit (McDonald and Ho, 2002). There are other sets of approximate fit indices (RMSEA: root mean square error of approximation, GFI: goodness of fit index, CFI: comparative fit index), most widely reported, that describes model fit from different perspective in the SEM literature. As a rule of thumb, to match the numerical estimate with the qualitative interpretation, an absolute direct effect < 0.10 would be considered as smaller effect; estimates around 0.30 (.11 to.49) as medium effect, and estimates > 0.50 as larger effect (Kline, 2011). Descriptive statistics is used to measure the mean, median, standard deviation, minimum and maximum of the variables

6. STATISTICAL TEST RESULTS

This part discusses statistical test results (correlations, SEM and descriptive statistics) to address objectives 1, 2 and 3 of the research. The data are gathered from 450 respondents, 156 of whom come from large CUs, 163 from medium CUs and 131 small CUs which are registered with CCULB. They are members, operational personnel and directors. They answered all 66 items in 10 sections. Their responses were taken to measure the relationship, and the degree of the effect of the variables.

6.1 The Descriptive Statistics Results

6.1.1. The NMCUD variables

This section assesses the existing BMP, ideology, organization, human resource, operating environment, marketing, member savings, member loan, financial discipline and financial structure of large, medium and small CUs using the attributes of the NCUDM in Bangladesh, through the descriptive statistics test results.

Table 3 shows the descriptive statistics results of the nine important NCUMD variables of the large, medium and small CUs in Bangladesh. Descriptive statistics results, as shown in the Table, indicate that ideology, organization, human resource, operating environment, marketing, member loan, financial discipline and financial structure have an average (All CUs) mean result (moderately agree) of 4.42, 4.76, 4.31, 4.69, 4.42, 4.94, 4.35, & 4.10, respectively, where highest value in member savings (\bar{X} =5.39, strongly agree), is the most important attribute of the NCUDM in Bangladesh. The financial structure attribute has the lowest mean result (\bar{X} =4.10, moderately agree), which means that capital strength monitoring attribute needs most attention among CUs in Bangladesh.

Table 3. Descriptive Statistics Results of the NMCUD Variables

The NMCUD Variables	Large		Medium		Small		All	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Ideology	5.00	.77	4.31	.76	3.85	.77	4.42	.89
Organization	5.15	.56	4.74	.63	4.31	.76	4.76	.73
Human Resource	4.72	.66	4.42	.79	3.70	.91	4.31	.89
Operating Environment	5.05	.72	4.65	.73	4.31	.61	4.69	.75
Marketing	4.87	.74	4.28	.75	4.05	.74	4.42	.82
Member Savings	5.45	.56	5.41	.47	5.29	.59	5.39	.54
Member Loan	5.14	.61	4.98	.65	4.65	.78	4.94	.70
Financial Discipline	5.18	.58	4.04	.78	3.75	.84	4.35	.96
Financial Structure	4.83	.90	3.78	.94	3.62	1.00	4.10	1.08

Yellow: highest Green: lowest

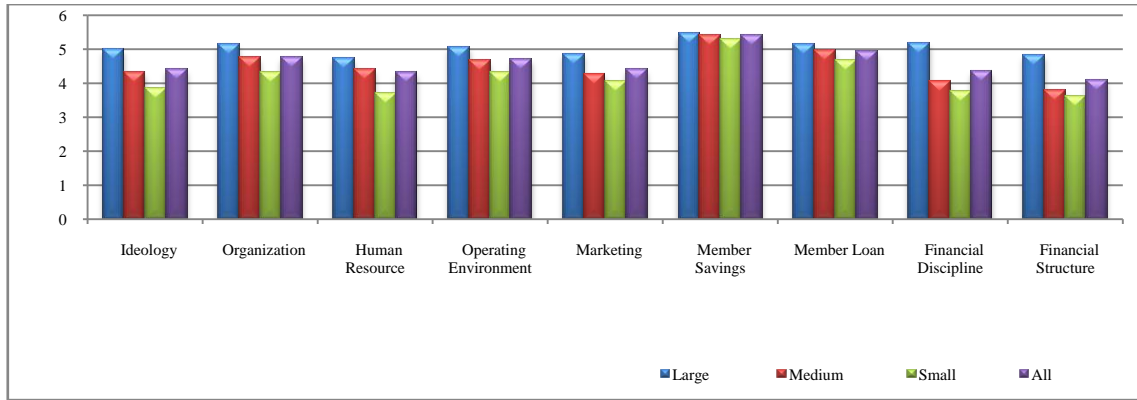


Figure 2. The NMCUD Indicators: Large, Medium, Small and All CUs

Table 3 also reveals that member savings has the highest mean score for large, medium, small CUs: \bar{X} =5.45, \bar{X} =5.41, & \bar{X} =5.29 (strongly agree), respectively. Human resource has the lowest mean score for large CUs \bar{X} =4.72 (moderately agree) while financial structure has the lowest mean score for medium and small CUs: \bar{X} =3.78, \bar{X} =3.62 (slightly agree), respectively. Comparing the statistics result of the large, medium, small and all CUs as shown in Table 3 & Figure 2, large CUs have above average (average) indicator, medium CUs have mixed (above and below), while small CUs have lower indicators. This shows the difference among large, medium and small CUs. The test results denote that there is no value on the indicator that disagrees (slightly, moderately, and strongly disagree); thus, nine attributes are all important and favorable for the NCUDM and CUs in Bangladesh.

The Components of BEP

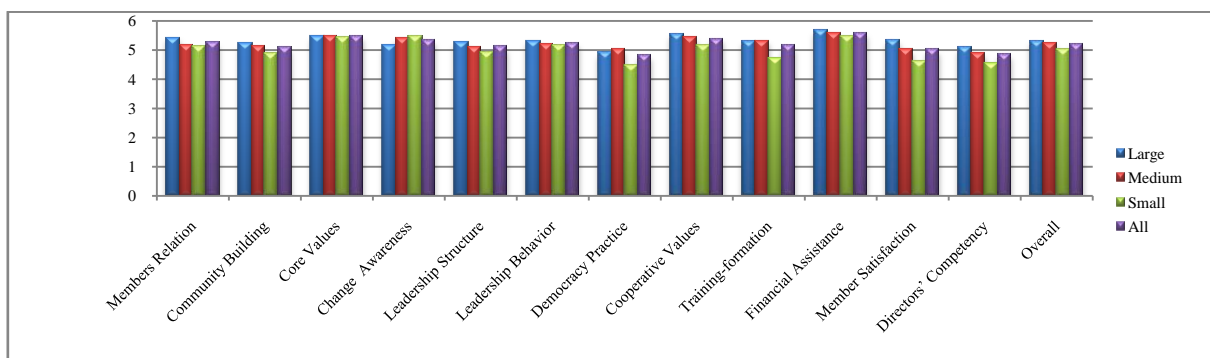
This section measures BEP that explores twelve major components – members relation, community building, core values, change awareness, leadership structure, leadership behavior, democracy practice, cooperative values, training-formation, financial assistance, member satisfaction, directors’ competency.

Table 4. BEP: Large, Medium, Small and All CUs

Components	Large	Medium	Small	All CUs	Qualitative Interpretation
Members Relation	5.42	5.17	5.12	5.24	Strongly Agree
Community Building	5.21	5.12	4.88	5.08	Strongly Agree
Core Values	5.48	5.47	5.44	5.46	Strongly Agree
Change Awareness	5.14	5.42	5.47	5.33	Strongly Agree
Leadership Structure	5.27	5.09	4.94	5.11	Strongly Agree
Leadership Behavior	5.32	5.18	5.16	5.22	Strongly Agree
Democracy Practice	4.90	5.01	4.49	4.82	Moderately Agree
Cooperative Values	5.56	5.44	5.15	5.39	Strongly Agree
Training-formation	5.31	5.33	4.73	5.18	Strongly Agree
Financial Assistance	5.66	5.58	5.47	5.57	Strongly Agree
Member Satisfaction	5.33	5.01	4.61	5.00	Moderately Agree
Directors’ Competency	5.07	4.89	4.56	4.86	Moderately Agree

Descriptive statistics results, as shown in Table 4, unveil that the twelve BEP components of all CUs – members relation, community building, core values, change awareness, leadership structure, leadership behavior, cooperative values, training-formation and financial assistance – have average mean scores of 5.24, 5.07, 5.46, 5.33, 5.10, 5.22, 5.39, 5.14, & 5.57 (strongly agree), respectively. Meanwhile, three components – democracy practice, member satisfaction, directors’ competency – have mean scores of 4.82, 5.00, & 4.85 (moderately agree), respectively. Table 4 also indicates that financial assistance have the highest mean score of \bar{X} =5.57 (strongly agree), while democracy practice has lowest mean score of \bar{X} =4.82 (moderately agree). This result is true to all CUs. The above results denote the following: **First**, CUs are important for financial assistance to members. **Second**, CUs need more attention in terms of democracy practice which is one of its core principles.

Figure3. Business Environment Performance: Large, Medium, Small and All CUs



Comparing the statistics results of the large, medium, small CUs and all other CUs as shown in Table 4 & Figure 3, large CUs have a mean score of above average but all CUs have a mean score of average. Medium CUs have mixed (above and below) mean score while small CUs have below mean score. This demonstrates the difference among large, medium and small CUs. The results denote that there is no indicator that disagrees (slightly, moderately, strongly disagree); thus, the twelve BEP components are important and favorable for CUs in Bangladesh.

2. Pearson Correlation Statistics Results

The Attributes of the NMCUD

This section discusses the result of Pearson Correlation Statistics of the nine attributes of NMCUD addressing the first objective which analyzes the relationships of the new model credit union development attributes when used as variables in the process of transformation towards the new paradigm. Based on this objective, the study has a null hypothesis test that there are no significant correlations between the variables of the NMCUD in the new paradigm in Bangladesh. The present study computed Pearson correlation coefficient statistic to test the hypothesis.

Pearson correlation coefficient statistical test, as shown in Table 5, bears positive mixed (strong, medium, weak) results based on the null hypothesis.

Table 5. Input Results of Pearson Correlation of the nine NCUDM attributes

	1	2	3	4	5	6	7	8	9
1 Ideology	1								
2 Organization	.57**	1							
3 Human Resource	.51**	.70**	1						
4 Operating Environ.	.59**	.65**	.53**	1					
5 Marketing	.55**	.72**	.61**	.63**	1				
6 Member Savings	.28**	.44**	.31**	.46**	.42**	1			
7 Member Loan	.40**	.64**	.56**	.60**	.65**	.50**	1		
8 Financial Discipline	.46**	.74**	.59**	.46**	.63**	.28**	.54**	1	
9 Financial Structure	.37**	.60**	.51**	.40**	.50**	.31**	.47**	.80**	1

** Correlation is significant at the 0.01 level (2-tailed).

Yellow: strong Gray: moderate Green: weak

The correlation analysis results, as shown in Table 5, reveals the nine variables that are important to the NCUDM which are significantly related ($p < .01$). The null hypothesis that there is no significant correlation among the business management performances of the NMCUD in the new paradigm in Bangladesh is rejected. Therefore, the correlation coefficient results conclude that there is significant correlation among variables of the NMCUD in the new paradigm in Bangladesh. Results, as shown in Table 5, unveils that all thirty-six pairs of variables are positively related; ten pairs are strongly anchored ($r = .61, p < .01$ to $r = .80, p < .01$); twenty-four pairs have moderate anchor ($r = .31, p < .01$ to $r = .60, p < .01$); while another two pairs have comparatively have weak anchor ($r = .28, p < .01$) (Frankfort-Nachmais, 2015; Healey 2005). Thus, there is no negative linear association between variables. This result testifies that the nine attributes are important for the NCUDM and favorable for CUs in Bangladesh.

The correlation analysis, as shown in Table 5, also reveals the variable with the most strong anchor between financial discipline and financial structure ($r = .80, p < .01$), between financial discipline and organization ($r = .74, p < .01$), between marketing and organization ($r = .72, p < .01$), and between human resource and organization ($r = .70, p < .01$), and six more pairs have strong anchor (Frankfort-Nachmais, 2015; Healey, 2005). Therefore, if the increase of one variable is strong, another variable follows with the same strength. This is possibly because financial discipline and financial structure are correlated to financial standard (WOCCU, 2007), organization, human resource and marketing. This signifies that corporate image, professionalism and products-services brand strengthen CUs financially and economically. Also shown in Table 5 are two pairs with comparatively weak anchor – member savings and ideology ($r = .28, p < .01$) and member

savings and financial discipline ($r=.28, p<.01$). This may possibly be due to the following reasons: **First**, CUs, except a few large CUs, do not have written mission-vision statement to adjust and relate member savings with ideology. **Second**, savings is one of the most important attributes of CUs; hence, this result means that CUs must deal with financial issues professionally for savings mobilization. The study validated the above evidence in field research by means of in-depth interviews and FGD.

The Components of BEP

This section discusses Pearson correlation statistics results of twelve specific components of BEP that address the second objective which is to analyze the relationships of the components of business environment performance in the new paradigm. Based on this objective, the study has a null hypothesis test that there are no significant correlations between the components of the business environment performances in the new paradigm in Bangladesh. Pearson correlation coefficient statistics has been computed to test the hypothesis. Shown in Table 6 is the result of the Pearson correlation coefficient statistical test. It bears positive mixed (strong, medium, weak) results based on the null hypothesis.

Table 6. Input Results of Pearson Correlation: The BEP components

SN	1	2	3	4	5	6	7	8	9	10	11	12
1 Members Relation	1											
2 Community Building	.56**	1										
3 Core Values	.46**	.50**	1									
4 Change Awareness	.12*	.19**	.23**	1								
5 Leadership Structure	.34**	.36**	.20**	.33**	1							
6 Leadership Behavior	.24**	.30**	.17**	.37**	.56**	1						
7 Democracy Practice	.27**	.37**	.20**	.08	.09	.22**	1					
8 Cooperative Values	.26**	.17**	.15**	.15**	.31**	.28**	.09*	1				
9 Training-formation	.18**	.12**	.11*	.14**	.20**	.19**	.21**	.27**	1			
10 Financial Assistance	.27**	.24**	.20**	.33**	.18**	.24**	.34**	.14**	.28**	1		
11 Member Satisfaction	.41**	.42**	.26**	.12*	.34**	.35**	.24**	.30**	.23**	.34**	1	
12 Directors' Competency	.40**	.35**	.23**	.12*	.50**	.47**	.19**	.26**	.22**	.27**	.66**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Yellow: strong Gray: moderate Green: weak

Table 6 shows that the correlation analysis results reveal that the twelve components that are important to CUs in Bangladesh are significantly related ($p<.01, p<.05$). Thus, the null hypothesis that there is no significant correlation among the business environment performances of the NMCUD in the new paradigm in Bangladesh is rejected. Therefore, the correlation coefficient results conclude there is significant correlation among the business environment performances of the NMCUD in the new paradigm in Bangladesh.

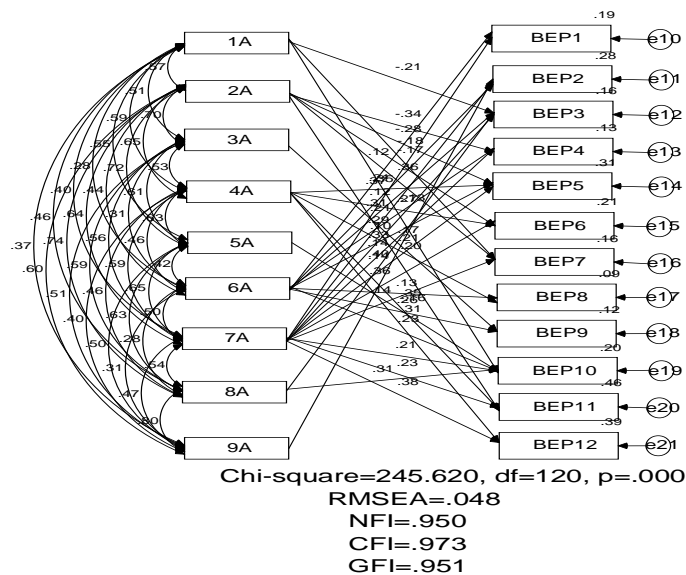
As shown in Table 6, results unveil mixed anchor in all sixty-six pairs of components although still significantly positive. One pair has a strong anchor ($r=.66, p<.01$), twenty-one pairs have moderate anchor ($r=.32, p<.01$ to $r=.56, p<.01$), while forty-two pairs have comparatively weak anchor ($r=.09, p<.01, p<.05$ to $r=.30, p<.01, p<.05$). Meanwhile, Table 6 also reveals the correlation are not significant between democracy practice and change awareness ($r=.08, p<.08$) and democracy practice and leadership structure ($r=.09, p<.07$) (Frankfort-Nachmais, 2015; Healey, 2005). The results also indicate the highest strong anchor and coefficient ($r=.66, p<.01$) between directors' competency and member satisfaction. This result possibly signifies that the more professional and competent the directors are in their performance, the more it gives financial satisfaction to members. Three pairs have comparatively lowest weak anchor – democracy practice and cooperative values ($r=.09, p<.05$); democracy practice and change awareness ($r=.08, p<.08$); and democracy practice and leadership structure ($r=.08, p<.07$) (Frankfort-Nachmais, 2015; Healey, 2005). This result signifies that CU members are unaware of authentic and purposive practice of their democratic rights while leaders are less attentive to change awareness; thus, a study of this nature becomes necessary to CUs in Bangladesh.

3. The SEM Output Results

This section discusses Structural Equation Modeling (SEM) Statistics results to address the third objective, i.e., to find out the significant effect of business management performances (BMP) to business environment performances (BEP) in the new paradigm. Based on this objective, the study has a null hypothesis test that there are no significant effects in business management performance to business environment performance in the new paradigm. SEM statistics was computed to test the null hypothesis.

The SEM statistical test, as shown in Figure 4, indicates mixed results based on the null hypothesis.

Figure 4 SEM Output Model: BMP on BEP



BMP:1A. Ideology, 2A.Organization, 3A. Human resource, 4A. Operating environment, 5A. Marketing, 6A.Member Savings, 7A. Member loan, 8A.Financial discipline, and 9A.Financial Structure

BEP:BEP1. Member relation. BEP2. Community building, BEP3. Core values, BEP4. Change awareness, BEP5. Leadership structure, BEP6. Leadership behavior, BEP7. Democracy practice, BEP8.Cooperative values, BEP9. Training-formation, BEP10. Financial assistance, BEP11. Member satisfaction, BEP12. Directors' competency

Figure 4 shows SEM output model that passes the chi-square is significant ($\chi^2_M=245.62$, $p < .01$, $df = 120$). Other reported superior fit statistics (CMIN/df=2.04, RMSEA=.04, NFI=.95, CFI=.97, GFI=.95, AGFI=.90) indicate appropriate well-fit model with data and accepted as favorable (Kline, 2011;Steiger, 2007;Tabachnick and Fidell, 2007). Thus, the null hypothesis that there are no significant effects in the credit unions' business management performance to business environment performance in the new credit union paradigm is rejected. Therefore, SEM output model results conclude there are significant effects in the credit unions' business management performance to business environment performance in the new credit union paradigm. Based on SEM analysis, as shown in Figure 3, output model bears mixed results (positive and negative). With a total of 21 variables (nine BMP attributes and twelve BEP components, as show in Figure 4, there are 36 observations available for this analysis.

Among the parameters, as shown in Figure 4 and Tables 7 to12 , the variable with the highest and largest estimate of effect is organization to democracy practice ($\beta=.78$, $p < .01$), while the variable with the lowest estimate is financial discipline to core values ($\beta=-.11$, $p < .01$, medium). The above output on parameters reveals that democracy practice increases .78for each 1.00 increase in organization. Results reveal that professional and corporate image of modern organizations help CUs to implement democracy practice. On the other hand, core values decrease .11 for each 1.00 increase in financial discipline. Results unveil standardized and strict ACCESS (PEARLS) branding may lessen focus on core values, similar output observed in micro-finance based lending organizations in Bangladesh.

Table 7. SEM Output Results: Ideology

Variables	Unstandardized Estimate	S.E	C.R.	Standardized Estimate	P-Values
Ideology → Core values	-.18	.04	-4.65	-.21	.000
Ideology → Democracy practice	-.32	.09	-3.56	-.18	.000
Ideology → Financial assistance	-.11	.04	-2.70	-.13	.007

Yellow: larger Gray: medium Green: smaller

Output model, as shown in Table 7, unveils three observations in ideology on BEP. All have (negative) medium effect on ideology and democracy practice ($\beta=-.32$, $p<.01$), core values ($\beta=-.18$, $p<.01$) and financial assistance ($\beta=-.11$, $p<.01$). The above output of parameters demonstrates that democracy practice decreases by .32, core values by .18 and financial assistance by .11 for each 1.00 increase in ideology. Thus, it is revealed that **first**, CUs should not operate business like other commercial financial institutions (banks); and, **second**, the NCUDM requires business-like ideology – meaning, more innovative products and services and vision-mission must be connected/linked to financial and social mission; and, to achieve social mission, CUs must focus on its financial mission (Jones, 2012; Richardson, 2000b).

Table 8. SEM Output Results: Organization and Human Resource

Variables	Unstandardized Estimate	S.E	C.R.	Standardized Estimate	P-Values
Organization → change awareness	-.44	.07	-6.05	-.34	.000
Organization → leadership structure	-.35	.06	-5.22	-.28	.000
Organization → leadership behavior	-.21	.07	-2.88	-.17	.004
Organization → democracy practice	.79	.13	5.87	.36	.000
Organization → member satisfaction	.26	.06	4.37	.20	.000
Human Resource → trainings & formation	.22	.06	3.73	.17	.000

Output model, as shown in Table 8, demonstrates five observations in **organization** on BEP. Two observations are positive effects of organization on democracy practice (larger) ($\beta=.79$, $p<.01$,) and member satisfaction (medium) ($\beta=.26$, $p<.01$). Three are negative/medium effect on change awareness ($\beta=-.44$, $p<.01$), leadership structure ($\beta=-.35$, $p<.01$) and leadership behavior ($\beta=-.21$, $p<.01$). The above output of parameters indicate that democracy practice increases by .79 and member satisfaction by .26 for each 1.00 increase in organization. On the other hand, change awareness decreases by .44, leadership structure by .35 and leadership behavior by .21 for each 1.00 increase in organization. Results reveal that, **first**, corporate image of modern organizations helps authentic democracy practice, thus, making it more member service-orientation; and, **second**, the NCUDM organization requires more qualified professional leadership, an expectation by members of the organization (as validated through focus group discussions). The output model, as shown in Table 8, demonstrates one observation in **human resource** in the area of training/formation ($\beta=.22$, $p<.01$) that is positive/medium. Training/formation increases by .22 for each 1.00 increase in human resource. This result reveals that, **first**, professional and competent qualified operational and board personnel provide right CU education to members. This result is related to organization which is very important. Presently, based on the core CU principle which is also its 5th principle, British CUs take it as a strategy during transformation/change in management (Jones, 2012; Decker and Jones, 2007).

Table 9. SEM Output Results: Operating Environment and Marketing

Variables	Standardized Estimate	S.E.	C.R.	Standardized Estimate	P-Values
Operating Environment → leadership structure	.42	.06	6.62	.35	.000
Operating Environment → leadership behavior	.32	.07	4.82	.27	.000
Operating Environment → cooperative values	.28	.07	4.26	.21	.000
Operating Environment → member satisfaction	.44	.06	7.42	.35	.000
Operating Environment → directors' competency	.41	.06	6.85	.31	.000
Marketing → financial assistance	-.16	.06	-2.70	-.16	.007

The output model, as shown in Table 9, demonstrates five observations in **operating environment** on BEP where all parameters have positive medium effect – operating environment on leadership structure ($\beta=.42$, $p<.01$), leadership behavior ($\beta=.32$, $p<.01$), cooperative values ($\beta=.28$, $p<.01$ larger), member satisfaction ($\beta=.44$, $p<.01$) and directors' competency ($\beta=.41$, $p<.01$). Results reveal that, **first**, CUs have standard by-laws, legislation and external regulations to secure leadership and corporative values; and, **second**, standard by-laws and regulations attain member satisfaction and require directors' competency. These are important parameters for transformation/change as cited in other research (Jones, 2012; Richardson, 2000b.). Output model, as shown in Table 7, unveils negative/medium effect of **marketing** on financial assistance ($\beta=-.16$, $p<.01$). Results reveal that financial assistance decreases by .16 for each 1.0 increase in marketing. Possible important reasons for these effects are: **First**, the present marketing style is only product publicity and improvement; it does not relate to innovative and business-like ideology, hesitancy to provide budget for research and development, modern office decoration, corporate style furniture-equipment and dress code, and similar results and reasons cited in other research (Richardson, 2000b.). **Second**, marketing in CUs is about glossy leaflets, poster and publicity. These increases in expenditures are unattractive to members.

Table10. SEM Output Results: Member Savings

Variables	Unstandardized Estimate	S.E.	C.R.	Standardized Estimate	P-Values
Member Savings → member relation	.18	.07	2.46	.12	.014
Member Savings → community building	.36	.08	4.64	.21	.000
Member Savings → core values	.17	.07	2.40	.12	.016
Member Savings → change awareness	.36	.09	4.18	.21	.000
Member Savings → leadership structure	.17	.07	2.44	.10	.015
Member Savings → cooperative values	.24	.10	2.67	.13	.008
Member Savings → trainings & formation	.55	.10	5.55	.26	.000
Member Savings → financial assistance	.33	.07	4.72	.23	.000

Output model, as shown in Table 10, reveals eight positive estimates in **member savings** (heart of NCUMD): training/formation ($\beta=.55$, $p<.01$), community building ($\beta=.36$, $p<.01$) and, change awareness ($\beta=.36$, $p<.01$). Results unveil that the eight BEP components (Table 10) increase (according to estimates) for each 1.0 increase in

member savings. Results signify that member savings is significantly favorable to CUs for departure from traditional concept to NCUDM; thus, it is most needed in new paradigm (Jones, 2012).

Table11. SEM Output Results: Member Loan

Variables	Unstandardized Estimate	S.E.	C.R.	Standardized Estimate	P-Values
Member Loan → member relations	.41	.06	7.44	.37	.000
Member Loan → community building	.41	.07	6.30	.31	.000
Member Loan → core values	.32	.06	5.15	.29	.000
Member Loan → change awareness	.45	.08	5.58	.34	.000
Member Loan → leadership structure	.51	.07	7.33	.40	.000
Member Loan → leadership behavior	.47	.07	6.37	.36	.000
Member Loan → democracy practice	.33	.13	2.56	.14	.010
Member Loan → financial assistance	.24	.07	3.61	.21	.000
Member Loan → member satisfaction	.31	.06	4.96	.23	.000
Member Loan → directors' competency	.53	.06	8.35	.38	.000

Table 11 also reveals ten positive estimates in **member loan** (heart of members) on BEP (three larger, fifteen medium), with directors' competency ($\beta=.53$, $p<.01$) and leadership structure ($\beta=.51$, $p<.01$) having the highest and second highest estimate result, respectively. Results unveil that the ten BEP components (Table 10) increase for each 1.0 member loan increase. Results signify that member loan is significantly favorable to CUs for departure from traditional concept to NCUDM; thus, most needed in new paradigm (Jones, 2012).

Table 12. SEM Output Results: Financial Discipline and Financial Structure

Variables	Unstandardized Estimate	S.E.	C.R.	Standardized Estimate	P-Values
Financial Discipline → core values	.11	.04	2.77	.14	.006
Financial Discipline → financial assistance	.26	.04	5.91	.31	.000
Financial Structure → community building	.12	.04	3.48	.14	.000

Table 12 shows the output result of **financial discipline and financial structure**. Specifically, on core values ($\beta=.11$, $p<.01$) and on financial assistance ($\beta=.26$, $p<.01$) the effect is positive, medium. In terms of effect of **financial** structure on community building($\beta=.12$, $p<.01$), the effect is similar. Output results reveal that the financial standard monitoring attributes of the NCUDM have lesser effect on the BEP components although it is in accord with expectation. Therefore, this study urges more research and development strategies (marketing attribute) to modernize CUs.

Table13. Results of Multi-collinearity Using Variance Inflation factor (VIF)

Independent Variables	Collinearity Statistics	
	Tolerance	VIF
1 Ideology	.56	1.80
2 Organization	.25	3.94
3 Human Resource	.45	2.21
4 Operating Environ.	.43	2.35
5 Marketing	.37	2.72
6 Member Savings	.68	1.48
7 Member Loan	.44	2.28
8 Financial Discipline	.23	4.27
9 Financial Structure	.35	2.89

Table 13 shows that there is no indication of multi-collinearity in the independent variables since the values of variance inflation factors (VIF) are all less than 5. These results suggest that all the independent variables should be included in the model.

7. DISCUSSION

This section explores the relationship and effect of BMP and MEP and summaries the findings accordingly. Using correlation coefficient and SEM, the null hypotheses are tested. Results show that there are significant relationships between business management performances (as shown in Table 5) and business environment performances (as shown in Table 6); and, significant effect (as shown in figure 4) in BMP on BEM components.

Pearson correlation results, as shown in Table 5, reveal that each attribute of the NCUDM are positively related with the other eight with different strength levels (strong, medium and weak). Each BEP **component**, as shown in Table 6, is positively related to the other eleven components with different strength levels (strong, medium and weak). Therefore, the study calculates that as one variable increases, there is a corresponding positive increase in another variable; thus, a significant consideration in the new paradigm. SEM output model, as shown in Figure 4 & Tables 7 to 11, shows mixed results (large and medium, positive and negative) in thirty-six BMP observations on BEP. Values of selected fit statistics reported generally indicate acceptable overall fit. Estimates of all parameters are highly significant. In other words, all parameters are significantly different from 0 where interpretations on parameter estimates are straight forward.

In terms of **ideology**, SEM output model, as shown in Figure 2 & Table 7, unveils negative medium effect on democracy practice ($\beta = -.32, p < .01$), core values ($\beta = -.18, p < .01$) and financial assistance ($\beta = -.11, p < .01$). The most possible reasons for negative effect (validated through FGD) are: (1) Presently, CUs do not have clearly written vision-mission linked/connected/related to financial mission with social mission; (2) Leaders operate CUs like auto-pilot and are unconscious-unaware; therefore, leaders should deal with CUs like business as conscious-awareness change-agent (Anderson and Anderson 2001). The results guide CUs to formulate clear-written vision-mission relating/connecting/linking BMP and core principles, as suggested in other researches (Decker and Jones, 2007; Richardson, 2000b.)

In terms of **organization**, SEM output model, as shown in Figure 2 & Table 8, reveals mixed results on BEP (two positive effects of organization on democracy practice and member satisfaction and three negative effect on change awareness, leadership structure and leadership behavior). The correlation results, as shown in Table 5, shows significant positive strong anchor between organization and human resource, operating environment, marketing, members' loan, financial discipline and financial structure ($r = .79, p < .01$ to $r = .62, p < .01$). Table 6 reveals positive weak anchor between democracy practice and cooperative values ($r = .09, p < .01$). Meanwhile Table 6 also reveals that correlation are not significant between democracy practice and change awareness ($r = .08, p < .08$) and democracy practice and leadership structure ($r = .09, p < .07$). The most important reason seen for the mixed results are: CUs, except for a few small ones, elect board members through regular election process. Members are interested to participate in governance; it is a positive sign for transformation. In other countries, member participation in governance is deficient (Jones, 2002). On the other hand, the possible reason for insignificant correlation is that presently CUs have too much tension in terms of communal and partisan democracy during general assemblies. Participation in governance by Board of Directors is politically-motivated (as unveiled in focus group discussions); thus, resulting to weakened common bond, increased conflict and fragile financial management. Therefore, results focused on NCUDM require organizational restructuring, skilled human resource, integrated marketing-business plan and external regulatory environment. Comprehensive transformation strategy must include attention to people, content and process. Therefore, the above attributes and components are most needed as they play important role in serving low income communities (Decker and Jones, 2007).

In terms of **human resource**, the SEM output model, as shown in Figure 2 & Table 8, reveals positive medium estimates on training/formation ($\beta = .22, p < .01$) of BEP. Correlation results, as shown in Table 6, indicates positive strong anchor between directors' competency with member satisfaction ($r = .66, p < .01$); and, moderately, related leadership behavior with leadership structure ($r = .56, p < .01$) and member relation with community building ($r = .56, p < .01$). The possible reasons seen are: **First**, historically, CUs in Bangladesh marked sixty years, assess that members are significantly interested in leadership to participate in governance as cited in British & Guatemala (Jones, 2002; Richardson, 2000b.). **Second**, common social bond are stronger in economic foundation; therefore, board members recognize and fulfill members' needs and expectations as cited by researchers Fuller and Mellor (2008). **Third**, the results also signify that there have been competent leaders who attempted to transform CUs in Bangladesh in new paradigm; but British rural credit unions face the problem of choosing competent leaders (Jones, 2002). **Fourth**, the most important social goal of CUs is to educate member on smart financial affairs and empower future leadership; however, field research unveils CUs' need for more professional and competent board personnel for its operations to provide the right education that will improve BMP and BEP especially in organization and human resource (Decker and Jones, 2007).

In terms of **operating environment**, the SEM output model, as shown in Figure 2 & Table 9, reveals five positive medium effects on BEP – leadership structure, leadership behavior, cooperative values, member satisfaction and directors' competency. The correlation results, as shown in Table 6, indicates positive medium anchor between operating environment and the other eight attributes. Results reveal the following reasons: **First**, CUs have external regulation

imposed by CCULB; therefore, CUs have standard by-laws and legislations. **Second**, the traditional practice of CUs is mutual relationship with federation, other CUs and related agencies which is important for transformation, as cited in other researches (Jones, 2012; Richardson, 2000b.). **Third**, modernized, growth-oriented, member-focused and participatory external regulation is most important for BEP (Jones, 2012).

In terms of **marketing**, the SEM output model, as shown in Figure 2 & Table 9, reveals one observation in **marketing** in terms of financial assistance ($\beta = -.15, p < .01$ negative medium). The correlation results, as shown in Table 5, reveals that marketing have mixed results (moderate and strong) with the other eight attributes. The possible reasons for this are: **First**, marketing has significant role in the growth and business performance of CUs. **Second**, the present marketing style is seen as product-publicity only. Therefore, improvement of marketing in CUs should relate with written ideology. **Third**, NCUDM marketing requires accessible premises, welcoming approachable operating personnel, affordable products and services, own branding and proper communication with members (Jones, 2009). Therefore, CUs need to revise marketing strategy in accordance with NCUDM requirement.

In terms of **member savings**, SEM output model, as shown in Figure 2 & Table 10, demonstrates eight observations (positively medium and larger) in **member savings** (heart of NCUD) and ten observations (positively medium and larger) in **member loan** (heart of members) on BEP. All parameters have positive effects that are important to NCUDM. Correlation results, as shown in Table 5, denote positive weak anchor between member savings and ideology ($r = .27, p < .01$) and human resource ($r = .30, p < .01$) and financial discipline ($r = .28, p < .01$) and financial structure ($r = .30, p < .01$). Results reveal the following: (1) Significantly, CUs focus on savings and lending as its foundation; other researchers made priority on above attributes for the development and growth of CUs (Richardson, 2000b); (2) Descriptive statistics results indicate, as shown in Table 3, savings has positive strong and highest value ($\bar{X} = 5.39$); therefore, savings becomes the heart of CUs as cited in the literature review (Jones, 20012, 2004); (3) credit unions, except a few large CUs, do not have clearly written mission-vision to relate ideology with others attributes. Thus, results suggest employment of more skilled and experienced human resource for savings mobilization to increase and provide greater member benefit and to fulfill its intention of 'not-for-profit' and not-for-charity but maximize member service. The study validated these reasons in field research.

In terms of **financial discipline** and **financial structure**, the SEM output model, as shown in Figure 2 & Table 11, reveals two positive medium estimates in **financial discipline** and one positive medium estimate in **financial structure** on BEP. The correlation results, as shown in Table 5, reveal positive strong anchor between financial discipline and organization, and marketing, and financial structure ($r = .80, p < .01$ to $r = .74, p < .01$). Possible reasons are: **First**, financial discipline and financial structure indicate the strength of organization in terms of economic and financial aspects. **Second**, financial discipline unveils the ratios and help in terms of marketing to members for further investment (Jones, 2012; Richardson, 2000b.). On the other hand, the most significant reason for lesser effect is that CUs are faced with lack of technical knowledge and competent human resource to use the ACCESS (PEARLS) brand. Similar results in London are mentioned in other researches. They use the one-year dividend to fund the modern computerized accounting system and to increase the statutory reserves for greater benefit (Decker and Jones, 2007). Focus group discussions unveil that CUs, in cooperation with CCULB and ACCU, have strategic planning to adopt ACCESS branding, while few large CUs have already adopted it.

There is no statistical gold standard in SEM that automatically and objectively leads to the decision about whether to reject or retain a particular model. Fit statistics in SEM does not generally provide a simple yes or no answer to the question. Several guidelines to interpret various fit statistics have been developed over the years. This judgment should have a solid basis in theory and a correct appreciation of the strengths and limitations of fit statistics. A scientific decision is ultimately a qualitative judgment that is based on the values of the research and societal concerns. As in all statistical inference, subjective judgment cannot be avoided, neither can reasonableness (Kline, 2011; Steiger, 2007; Tabachnick and Fidell, 2007).

8. CONCLUSION

The major intent of the present investigative transformational study is to contribute some initial hard data of the NCUDM to scientifically support and encourage CUs in Bangladesh to adopt the attributes in transforming to a new paradigm. The diagnostic tests employed in this study ruled out serial relationship and effect of BMP and BEP. The study bears mixed results in relationship between attributes and between components and the effects on BMP to the BEP. Results also show that some of the attributes and components are already strengthened while others need more attention in the process of transformation towards the new paradigm in Bangladesh. Results of test on some null hypotheses are rejected while others conclude that there are significant relationships between variables of the NCUDM and significant relationships between components of business management performance. Moreover, it is also concluded that there are significant effects in business management performance to business environment performance in CU new paradigm in Bangladesh.

Coefficient r of correlation results identified significant positive relationship and strength between nine important attributes. Results revealed mostly strong relationship and coefficient, where some have medium relationship and coefficient and few have comparatively weak relationship and coefficient. In similar pattern, results revealed the significant positive relationships between twelve components of the BEP as a result of the shift to the new CU paradigm in Bangladesh. CUs have great opportunities to accept the NCUDM in transformation process to a new paradigm. SEM output model results revealed the significant effect in business management performance on business environment performance and the NCUDM model is fit for transformation of CUs in the new paradigm in Bangladesh. Results unveiled CUs are on right direction where member savings, member loans and operating environment have the most significant effect and ideology, organization, human resource, marketing, financial discipline and financial structure require more competent people, more systematic process and scientific content for transformation of CUs to new paradigm. Meantime, some indicators, while they are not statistically significant, are in accord with expectation. Present mixed results are significant contribution to knowledge and an addition to CUs in Bangladesh.

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