



Determinants of Intellectual Management and Sustainable Development as a Challenge and Way of Forward: an Exploratory Investigation

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Abstract: *Intellectual Management (IM) and Sustainable Development (SD) has been studied to investigate the influence and relationship between them. To reach the purposes, 283 relevant collected data from 30 organizations were utilized for result analysis while a self-administered survey instrument on IM and SD were distributed through simple random sampling technique by selected representatives. A perfect positive relationship between IM & SD and a strong positive influence of IM on SD in the different universities and banking organizations have been found in the findings from the analysis of descriptive and inferential statistics. The findings and future directions definitely proposed to think for taking tactful decisions, initiatives with intellectual strategies to face 21st century's challenges and obstacles by the concerned academical and managerial authorities at the educational and banking sector in Bangladesh. The real observations & experiences suggests that an 'emergent intellectual problem solving team' is recommended to reduce problems of bureaucracy, system-loss, session-jam, biasness of concerned authorities, religious & localization discrimination and solve any kind of problem without wasting valuable times of students at educational sector and customers or clients at financial institutions of Bangladesh. The paper has minimum limitations but a great theoretical implication in the field of literatures and practical implications for the academicians, bankers, entrepreneurs, professional and other business holders or industrialists.*

Keywords: Intellectual Management, Strategic Planning, Conflict Handling, Strategic Leadership, Intellectual Controlling and Sustainable Development.

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1. Introduction

In the age of competitive, crudest and dynamic working environment, it is very tough to face challenges and obstacles to establish and survive of an organization successfully. So, it is very important to do strategic working plan, decision making, proper monitoring and efficient controlling system for employees and intellectual managerial body who can design a strategic working plan and conduct the organizational activities with intellectual capabilities which can ensure a sustainable development for an organization, society as well as country. The present paper conducted to identify the link and influence of intellectual management (IM) on sustainable development (SD) - where Strategic Planning (SP), Strategic Innovation (SI), Conflict Handling (CH), Problem Solving Approach (PSA), Strategic Leadership (SL), Intellectual Controlling (IC) are the independent variables under IM and the dependent variables SD concerned with employee's, organizational, environmental, economic and social development of a country.

Basically, concept of Intellectual Management (IM) concerned with the terms of 'intellectual' and 'management'. The term 'intellectual' adopted with a person who has intellect or mental capability to think, research and reflect a proper decision, suggest an efficient solution against a problem from the real perspective of an organization, society as well as nation. Again, management of an organization is the process of establishing objectives and goals of the organization periodically, designing the work – system and the organization structure, and maintaining an environment in which individuals, working together in groups in combination with capital equipment and current assets (working capital), accomplish their aims and objectives and goals of the organization effectively and efficiently (Rao, 2016). Thus, Barnov et al., (2008) interpret that Intellectual Management (IM) procedures involved with logical system and neural networking stages of human being where logical system concerned with systematic work plan development, maintaining proper rules and regulations, conducting & monitoring all of the activities intellectually; and neural networking approaches engaged with various important ideology such as human capital, intellectual capital, knowledge management, rational capital, intellectual property etc. for developing an efficient strategic planning, strategic innovation, conflict handling ability, problem solving approach, strategic leadership and intellectual controlling to establish an organization in an expected position. Therefore, Intellectual Management (IM) can be defined as the process of making people efficient, contributive cognitive, devotees, thankful for talent academic & managerial activities with effective utilization of concerned resources by strategic-work-plan & decision making, strategic leadership &



intellectual controlling, regular monitoring & implementation to achieve pre-selected objectives and goals.

Development generally concerns with the economic growth of a country i.e., when a country's productive capacity increases then it will be developed and this productive capacity involved with resource (employee) development, organizational development and social development too. The Sustainable Development (SD) indicates that the lessons of ecology can, and should, be applied to economic processes and it encompasses the idea in the world conservation strategy, providing an environmental rationale through which the claims of development to improve the quality of (all) life can be challenged and tested (Redclift, 1987). Sustainable Development (SD) concerned with the procedure of development for present and next generation to meet the necessity of the people with efficient resources arrangement, pre-cautions to face obstacles and challenges which will develop organizational, environmental and socio-economic condition of a country.

Educational sector is the key place of building, developing and preparing a human being as an intellectual resource for the society as well as nation. Because without education a human being not only an illiterate person but also treated as a blind man for society. Thus for preparing a delightful human being (who can take intellectual decision, can manage an organizational activities intellectually) – the essentiality of educational sector is irrefutable. On the other side banking sector has a great role in the total economy of Bangladesh. Though the main activities of banking institutions is to collecting and lending money, this financial sector also invest money for the development of Bangladesh. To think about the great contributive role of educational sector and banking sector in where IM is preferably applicable for sustainable development in Bangladesh; authors decided and encouraged to conduct the present study.

2. Literature Review

As the Intellectual Management (IM) is implicated with Sustainable Development (SD) and these are vital issues for current competitive & complex workplace environment, thus a brief on reviewed literatures is necessary to demonstrate.

2.1 Literature Review related on Intellectual Management (IM)

Milov, Suslov and Kryukov (2011) focused on IM based phases regarding construction of workplace environment and information – management systems at some organizations and they emphasized



on the approach of 'designing mixed intellectual decision support system for an industry. As IM concerned with some components of intellectual capital management and knowledge management for the sustainable development, Wiig (1997) suggested that progressive managers need to work strategically with intellectual capital management and knowledge management with technological-advancement for the stable economic development of a society.

Again Petty and Guthrie (200) conducted a research study on the integration of capital, knowledge and intellectual management to think about the crucialty of risen economy and they decided that for the development of economy, management, technology and society; information-technology based society & workplace and knowledge-based economy with strategic innovation should be established.

Nerur, Rasheel and Natarajan (2008) examined intellectual framework of the strategic management area through co- citation analysis during the period of 1980 – 2000 using multi-techniques of data analysis which provides a great insight in the field of IM with a structural strategic view of management. Culnan (1986) suggested for the development of theory-based intellectual management which might be interpreted a link between MIS- research advancement and organizational effectiveness during the period of 1972- 1982 involving theoretical enhancement of IM. Besides that an analysis on the application of IM has been recommended during the period of 1980- 2000 which concerned with the parts of intellectual management (SP, SI, CH, PSA, SL and IC) research at different organizations strategically.

From the brief of literatures it is clear that Intellectual (IM) can be referred as a process that involved with intellectual human capital management, knowledge management, intellectual MIS with all of the management and strategic management tools (such as SP, SI, CH, PSA, SL and IC) to establish an organization successfully and for facing dynamic challenges and competitive environment in a market.

2.2 Literature Review related to identified components of IM

As the IM refers that the managerial people or corporate executive bodies have to perform managerial activities such as Strategic Planning (SP), Strategic Innovation (SI), Conflict Handling (CH), Problem Solving Approach (PSA), Strategic Leadership (SL) intellectually and Intellectual Controlling (IC) for reaching organization's mission and vision with the accomplishment of objectives and goals. Again though IM is concerned with a number of functional activities, this study is conducted by some



of them and the included components are SP, SI, CH, PSA, SL and IC. Thus a short backdrop study on these components is illustrated below;

Strategic Planning (SP) concerned with specific initiatives to reach expected business/ organizational objectives or goals with available resources, policies and programs. Again it is a procedure in which organization's corporate body determines the vision for the future as well as the goals and objectives for an organization (Rouse, 2016). More than that Heracleous (1998) showed a relationship between strategic planning (SP) and strategic thinking (ST) for SD with an extensive literature, identifying varieties of relationship, nature of SP and ST by building single-loop learning for SP and double- loop learning for ST, and suggested that there is logical relationship between SP and ST for stable sustainable development (SD).

Hayes (1985) emphasized on the importance of strategic planning to reduce the deteriorating of manufacturing companies in a competitive situation. Robinson and Pearce (1984) also suggested some guidelines for effective SP in the future. The realistic and feasible SP direct a long term growth and development for a firm or companies (Berry, 1998).

Strategic Innovation (SI) concerned with the new idea or anything new notion with existing one which has a strategic application to face challenge and competition in a market. Charitou and Markides (2002) interpreted about the SI with its disruptive conditions that is if one company innovate anything new in an industry and got success in a competitive market then other companies in that industry fall in a disruptive situation for that SI of particular company. Sundbo (2001) represents a significance of theory-based strategic innovation in a firm with internal and external environments of that firm in a development process.

Conflict Handling (CH) is a significant measure of quality for an intellectual manager. Because conflict can be occurred for different reasons but if the conflict-handling procedure is intellectual then organization's developmental growth will be interfere less. Conflict is the process which begins when one party perceives that another is frustrated or deprived by decision-making which switched over into a conflict (Grosf, 1997). Again conflict is an inescapable feature of social life, it is the subject of extensive research (Cosier & Ruble, 1981). They examined about the conflict- handling behaviors based on a two dimensional model that identifies five modes for managing conflict. Thomas (1998) conducted a research study on 'conflict- handling modes' with update literature review on conceptual differences, ambiguities and oversimplifications as a reason of conflict and



accordingly he interpreted, contributed some theoretical assumptions to solve conflicted and problematic situation.

Problem Solving Attitude (PSA) referred that problem solving as a behavioral process which makes available alternative responses for dealing a problematic situation (D'zurilla & Goldfried, 1971). They identified 5-stages for solving problem in an organization and these are; general orientation, problem definition and formulation, generation of alternatives, decision making and verification. They also suggested that 'self-control training' and 'individual learning training' as a problem solving measure of an intellectual management. Jonassen (2000) explicated about an 'instructional design community' for problem solving with important issues and programs. He articulated a better design model with issues and program in order to stimulate discussion, research and development of problem solving instruction. Haley (1987) focused on a therapy approach as a specific technique for solving human dilemmas by which clients' problems can be solved within a framework. PSA is usually regarded as a significant cognitive and intelligence activity in daily and professional life. It is required in formal educational sector and other financial as well as business sector for the continuance of development.

Strategic Leadership (SL) is the strategic technique of directing and intellectually stimulating people for fetching out the best performance from them to reach goals with sustainable and successful development of an organization. Elenkov, Judge and Wright (2005) investigated an association of strategic leadership (SL) practices on the higher management and social culture which showed a positive, moderated and effective relationship between SL on social culture for sustainable improvement of the organization as well as society. Additionally SL needed in 21st century firms which involved with building company resources and capabilities with an emphasis on intangible social capital and human capital (Hitt & Duane, 2002). Another research paper investigated that transformational and transactional behavior of strategic leaders for effective result of organizational learning which concerned with exploratory and exploitative innovation and environmental dynamism also need to be taken into account to effective operations of strategic leaders for sustainable development of the organization, society and nation (Jansen, Vera, & Crossan, 2009).

Intellectual Controlling (IC) comprises a system with intelligence and remote control activities by which efficient monitoring and corrective measures of performance are dialectical or rational or impartial. Mifune et al., (1995) simplified about intellectual controlling (IC) as a driving force of



intellectual management (IM) which concerned with structural members and architectural structure, it includes robot system which is electrically linked through radio communication i.e., an onboard computer and a host computer equipped with a locomotive mechanism can be used for IC in an organization. Moreover, the intellectual and remote control functions based on the control network, designed for the terminal equipment of IC (Xu & Ding, 2008). Additionally, First (2006) emphasized on intellectual property law for IC, though some law is out of control but the essential & applicable rights, authorities and laws must be followed for IC to direct, monitor and taking proper measure for the employees that can be ensure sustainable growth of an organization.

2.3 Literature Review related to Sustainable Development (SD)

The term sustainable development (SD) was used at the time of 1970s and since then it has become the trademark of international organization, dedicated to achieving environmentally benign or beneficial development (Redclift, 1987). SD is a complex concept that implies the integration of three systems: ecological, economic and social which seeks a compromise between natural environment and pursuit of economic growth that increase the material standard of living of the poor which could be quantitative measured; it maintains that the stock of overall capital assets remains constant or rises over time (Islam, 2012).

The concept of SD is an attempt to combine growing concerns about a range of environmental issues with socio-economic issues for intellectual and organizational development and it has the potential to address fundamental challenges for humanity, today and tomorrow (Hopwood, Mellor, & O'Brien, 2005). Another paper examined the conceptual history of SD from 1987 to today which argued that superficial consensus has characterized much debate on the series of SD and it has a great impact on biology, natural science and environmental justice and it is lucidly specified that the issues of global environmental justice are very essential for sustainable development due to the demand of re-engagement with social consequences in the 21st century (Redclift, 2005).

SD has emerged as the recent development catchphrase that have an effect on governmental and nongovernmental organizations and it demonstrated a great role in the context of international business, agriculture forestry, political extent as well as intellectual rigor and clarity (Lele, 1991). The SD policies can increase environmental awareness, growth for the consumers & organizations, can improve its environmental performance on leading exponents of the academic & business field by the various components of intellectual management with appropriate applications and implementation today (Elkington, 1994).

Lastly, though so many research studies have been conducted separately on the different variables of IM and SD, no research study is found on IM and SD in the context of Bangladesh. This gap has induced the authors to conduct the current study.

3. Research Objectives and Presumed Hypotheses

The major research questions (RQ) of this paper are:

RQA- What is the association between IM and SD? And

RQB- Does the IM influence SD?

To reach the answer of these research questions, two major research objectives (RO) have been set for this paper:

Research objective one (RO1) - is to explore the relationship between IM and SD and

Research objective two (RO2) - is to investigate the influence of IM on SD.

Based on objectives, subjective theme and review of the literature, a hypothetical model has been delineated in below;

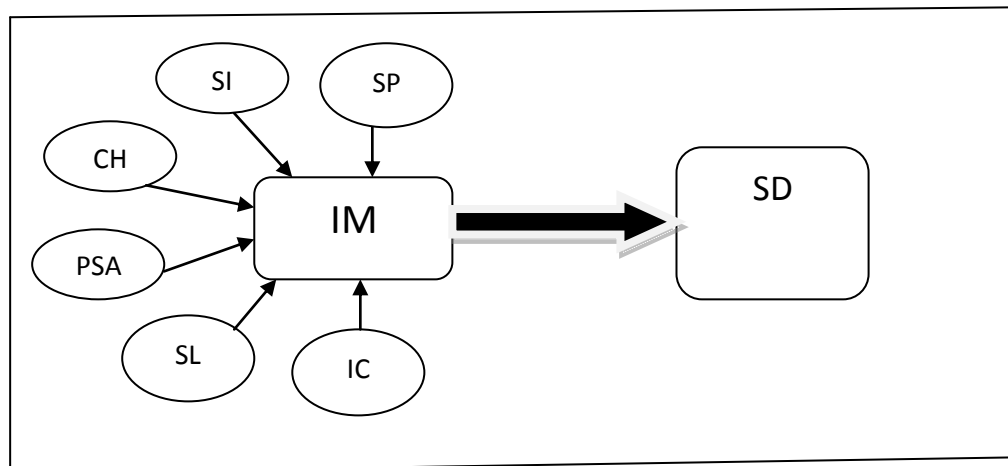


Figure - 1: A conceptual hypothetical model of IM and SD

Source: Authors' own contribution

Research Hypotheses: Figure-1 illustrates the principal hypotheses may be formed as follows:

H0: There is no relationship between IM and SD.

H1: There is a significant relationship between IM and SD

On the basis of principal hypotheses and conceptual hypothetical model of IM and SD, the following supporting hypotheses have been developed to conduct the present study.

H1a: SP has a positive influence on SD

H1b: SI has a positive impact on SD

H1c: CH has a positive affect on SD

H1d: PSA has a positive influence on SD

H1e: SL has a positive association with SD

H1f: IC has a positive effect on SD

4. Research Methods

The research methods described under following headings:

4.1 Research Design and approach

The paper adopted with exploratory and descriptive research design that fall in the philosophy of positivism and pragmatism with the research assumption of ontology. A deductive approach and a quantitative data analysis technique were used to examine the result of the study.

4.2 Survey Instrument for Intellectual Management (IM)

A self - administered survey questionnaire was designed from pertinent research materials with the components IM and SD, and after a focus group discussion, pilot survey; reliabilities were tested using Cronbach alpha method and then the survey instrument was finalized to collect data and information. The ideas and statements of the items for IM were fetch-out from some research studies and these were (Thompson & Strickland, 2003; Cowan et al., 2009; Robbins, 2003; Dess et al., 2013; Wehrich & Koontz, 1993; Griffin, 1998; Hartley, 2013). Finally 22 items were used to measure the perceptions and opinions of respondents on IM. Sample items were, 'My organization's intellectual strategic plans are mission and vision oriented', 'before setting goals and objectives my organization depends on thorough diagnosis', 'any strategic invention by the employees is encouraged in my organization', 'individual conflict is handled very tactfully by the management in my org.', 'in my organization management can solve any kind of problem of the employees', 'strategic leadership in case of setting organizational design and direction is very clear in my org.', in my org. employees performance evaluation standard is set vey intellectually as a measure of controlling', etc.



4.3 Survey Instrument for Sustainable Development (SD)

The authors of this study has assessed a number of research studies relevant with Sustainable Development (SD) and after a thorough justification, the relevant statements for the items were initiated from following research study (Cash et al., 2003; Mekenzie, 2004; Redclift, 1987; Islam, 2012) and after a pilot survey and then testing reliability, 11 items were finalized to produce and distribute an instrument on SD for collecting data and information from the respondents. The sample items were, 'Sustainable development depends on the knowledge development of the employees in our organization, 'Training & development strategic plan is essential for sustainable development', Information & Technological development is the key force for sustainable development in our org.', etc.

4.4 Technique of Data Collection and Response Rate

300 questionnaires were distributed using single representative from each of 30 organizations (12 Universities, 18 banking organization) and each representative distributed & collected data from 10 respondents in each of 30 organizations and the representatives were randomly selected by the authors. As the data has been collected using simple random sampling method (probability sampling technique), thus maximum 291 (97%) questionnaires have been returned but finally 283 (97%) responses have utilized for data analysis for findings and rest of the questionnaires have been rejected for non- returning, non-response and for some error and 3% non-returned and 3% non-response rate is very much normal for a research study. Again 97% response rate is highly acceptable to conduct a study. The teachers from different Universities and bankers from different Banks were the respondents of this study.

4.5 Reliability and Validity Measure

For testing **reliability**, the most popular Cronbach's alpha method also known as Coefficient alpha (Malhotra, 2002; Hair et al., 2008) used in this study. The Cronbach's alpha for different variables of this study is shown in below (where total no. of item for IM is the addition of all independent variables' item under IM) ;

Table-I: Reliability Statistics for IM and SD

Variables	Cronbach's Alpha (α)
SP	.89
SI	.80
CH	.65
PSA	.63
SL	.85
IC	.82
IM	.86
SD	.94

Source: Authors' own-research from primary data

Validity is the accuracy of a measure or the extent to which a score truthfully represents a concept (Zikmund et al., 2010; Saunders et al., 2011). In this study, the existence of face, content and criterion validity is very strong. Because the 'subjective agreement among the professionals and concept reflections ensure strong face validity for the study. Again, content validity is presented because the measurement instruments concerned with relevant topic under IM and SD this study. Criterion validity is also presented because the study denotes the criterion variables i.e., demographic characteristics, attitudinal, and behavioral measures (respondents perceptions and opinions) those are collected in the time of data collection.

4.6 Data Analysis

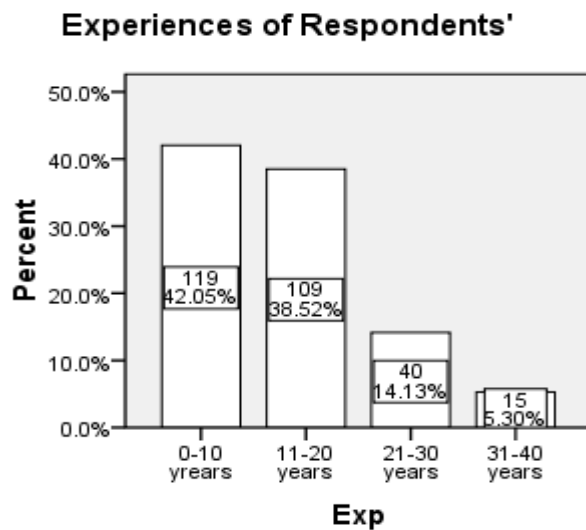
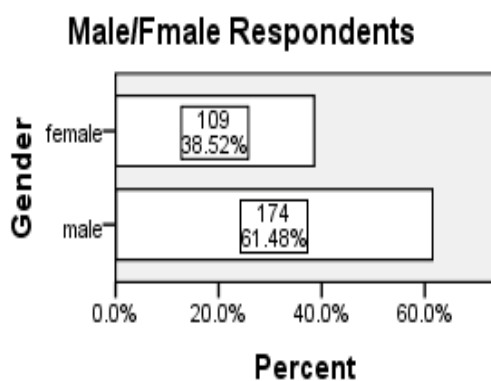
All of the reasonable data had been measured using SPSS statistics 16.01 database for testing result with quantitative data. And the data have been measured with numeric value against each item of the instrument by 7- point Likert scale ranging from 7 (strongly agree) to 1 (strongly disagree). The subjective or statement based data (from survey instrument) have been analyzed by descriptive and inferential statistics (correlation and regression analysis) for investigating the association and influence of IM and SD. The demographic data have been analyzed with the percentage of male/female respondents, their experiences, educational status and age distribution.

5. Findings

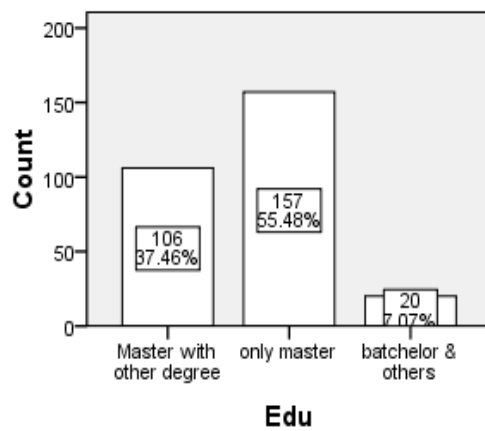
The findings of the paper concerned with necessary figures and tables which have been discussed in below:

5.1 Demographic features of the respondents

The different demographic characteristics are exhibited below using bar-diagrams;



Educational Status of Respondents'



Age Distribution of Respondents'

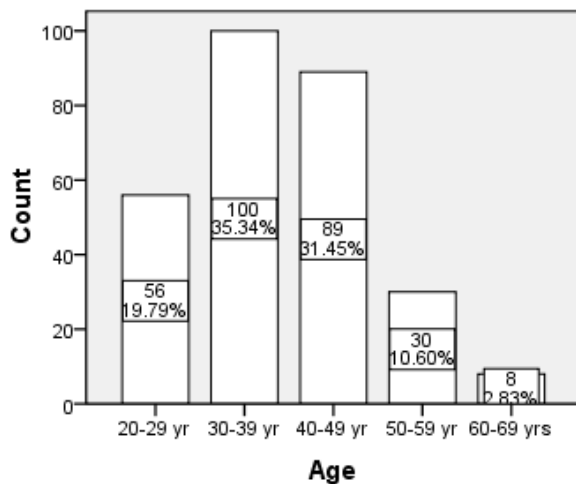


Figure -2: A depiction of demographic data

Source: Authors' own research from primary data

Figure-2 indicates that the usable number of responses in this study were 283 while male respondents were 174 (61.48%) and female respondents were 109 (38.52%).

The range of experiences for the respondents have been initiated from 0 to 10 years, 11 to 20 years, 21 to 30 years, 31 to 40 years while respondents comprised under these ranges as 119 (42.05%), 109 (38.52%), 40 (14.13%) and 15 (5.30%) consecutively.

The maximum number of respondents were well educated; 106 (37.46%) were master with other degree holders, 157 (55.48%) were only master degree holders and bachelor with other degree holder 20 (7.07%) who were working in different educational and banking organizations.

The age range of respondents were from 20-69 years while 56 (19.79%) respondents from 20 to 29 years, 100 (35.34%) from 30 to 39 years, 89 (31.45%) from 40 to 49 years, 30 (10.60%) from 50 to 59 years and 08 (2.83%) from 60 to 69 years. The respondents were from educational sector (12 University) and Banking sector (18 Bank) who provide their valuable opinion, perceptions and information to conduct the current study.

Table – II reveals that only the variances 2% for IM and 3% for SD have been explained by the socio-demographic features (e.g. gender, experience, position, education, and age). It indicates a large portion of variances in IM and SD are unexplained. These unexplained variances simplify that there are other potential facts or information which have an account for variations in the IM and SD.

Table- II : Regression Analysis of Demographic Characteristics of IM and SD.

Covariates	Coefficients (β)		S. E (β)		Value of 'T'		Value of 'R ² '		Value of 'F'- statistic	
	IM	SD	IM	SD	IM	SD	IM	SD	IM	SD
Gender	.10	.13	.09	.10	1.14	1.28	.02	.03	1.3	1.5
Experience	-.14	-.15	.08	.09	-1.62	-1.62				
Position	-.23	-.24	.12	.13	-1.86	-1.80				
Education	.02	-.01	.08	.09	.17	-.14				
Age	.04	.04	.07	.07	.59	.53				

Source: Authors' own research, 2017

N= 283. IM= Intellectual Management. SD= Sustainable Development.



5.2 Relationship between the components of IM and SD.

Table – III indicated a strong positive relationship between IM and SD ($r = 0.88, p < 0.01$) and also a strong positive relationship between the components of IM (SP, SI, CH, PSA,SL, IC) and SD i.e., SP and SD ($r = 0.83, p < 0.01$); SI and SD ($r = 0.70, p < 0.01$); CH and SD ($r = 0.78, p < 0.01$); PSA and SD ($r = 0.73, p < 0.01$); SL and SD ($r = 0.84, p < 0.01$); IC and SD ($r = 0.85, p < 0.01$); so the findings of the study supported that there is a significant positive relationship between the components of IM and SD.

Table- III: Mean, Standard Deviations, and Correlations between the components of IM and SD.

Variables/ Components	M	STD	Correlations								
			1	2	3	4	5	6	7	8	
1. SP	5.93	1.02	1								
2. SI	5.91	.84	.68	1							
3. CH	5.90	.94	.67	.33	1						
4. PSA	6.15	.61	.74	.32	.86	1					
5. SL	5.86	1.02	.89	.77	.45	.45	1				
6. IC	6.06	.84	.84	.87	.62	.70	.76	1			
7. IM	5.92	.78	.95	.76	.78	.80	.85	.93	1		
8. SD	5.93	1.09	.83	.70	.78	.73	.84	.85	.88	1	

Source: Authors’ own research, 2017

**Correlation is significant at 0.01 levels (2-tailed). N= 283. SP= Strategic Planning, SI= Strategic Innovation, CH= Conflict Handling, PSA= Problem Solving Attitude, SL= Strategic Leadership, IC= Intellectual Controlling. IM= Intellectual Management, SD= Sustainable Development.

5.3 Influence of the components of IM on SD.

Table-IV denoted that 86% (R^2), 56%, 65%, 63%, 71%, and 81% observed variability in SD explained by SP, SI, CH, PSA, SL and IC gradually as components of IM while separately 87% variances in SD explained by the IM. It is, therefore, argued that all the factors or components of IM (SP, SI, CH, PSA, SL and IC) have a strong influence on SD. Thus, components of IM (SP, SI, CH, PSA, SL and IC) are the significant predictors in explaining SD.

Table – IV: Regression Analysis regarding the components of IM and SD.

Predictors	DV	Coefficient (β)	S.E. (β)	Value of 'T'	Value of ' R^2 '	Value of 'F'- statistic
SP	SD	.71	.02	42.52**	.86	1.80**
SI	SD	.68	.04	18.75**	.56	351.44**
CH	SD	.66	.03	23.21**	.65	538.98**
PSA	SD	1.0	.05	21.86**	.63	477.94**
SL	SD	.65	.02	26.84**	.71	720.77**
IC	SD	.83	.02	35.42**	.81	1.25**
IM	SD	1.02	.01	106.73**	.87	1.13**

Source: Authors' own research, 2017

**Test of result is significant at 0.01 levels & 0.05 levels. N= 283. SP= Strategic Planning, SI= Strategic Innovation, CH= Conflict Handling, PSA= Problem Solving Attitude, SL= Strategic Leadership, IC= Intellectual Controlling. IM= Intellectual Management, SD= Sustainable Development.

6. Discussions

The first objective (RO1) of this study was - to explore the relationship between IM and SD and according to the survey result from the primary data, it is indicated that there is a strong positive relationship between the individual components of IM (SP, SI, CH, PSA, SL and IC) and SD. Besides that there is a strong association between IM (considering all the components combinely) and SD.



Thus the results satisfy the 1st objective (RO1) of the current study. Again the presumed hypothesis (H0) was there is no relationship between IM and SD but the result proved that there is a strong and significant positive relationship between IM and SD i.e., the alternative hypothesis with other supporting hypotheses (H1a, H1b, H1c, H1d, H1e, H1f) is highly accepted & supported by the findings of the study.

Hence it is found that the practices of IM in Educational and Banking sector is very strong for continuing & retaining sustainable development (SD) in Bangladesh.

The 2nd objective (RO2) of this study - was to investigate the influence of IM on SD. The findings due to primary data revealed that the SD is influenced strongly and positively by all of the components of IM individually and accumulately. Thus the results satisfy the 2nd research objective (RO2) of the present study. Again the result of the 'T'- test for all of the components of IM with SD is positively significant. Thus according to 'T'- test, the predicted null hypothesis (H0) is rejected and the alternative hypothesis (H1) is accepted.

Hence, it can be stated that educational and banking organizations have specific strategic planning, encourages strategic innovation, maintain systematic conflict handling procedure, positive problem solving attitude, try to leads employees strategically & positively and intellectually maintain control procedure for the subordinates as well as involved others in Bangladesh.

But in reality IM practices scenario is little bit different (according to observation & experience), that is sometimes problems of bureaucracy, system-loss, biasness of management (religious biasness, nepotism), mentality of concerned authorities, discriminative decision-making, are hampering the practices of IM for sustainable development in some of educational and banking organizations in Bangladesh.

6.1 Directions for Further Research

The findings of this paper definitely will help to think and take tactful decisions, initiatives with intellectual strategies to face 21st century's challenges and obstacles by the intellectual managerial authorities at the different organizations for sustainable development in Bangladesh.



SP structure should be intellectual by the concerned policy – makers in the respective organization. A 'specific planning committee' can be introduced to make intellectual strategic planning considering internal and external environmental forces with available resources.

SI is the unique & different initiative of advancement in a development process. Thus educational, banking and other organizations need to emphasize on SI to face competitive business environment, 21st century's challenges and pitfalls.

Conflict can be arisen from the different issues. For instance, localization discrimination; if a local people get preference in case of recruitment or for getting any position, then the other area's people will be deprived and ultimately an internal dissatisfaction will be create an external conflict within a country and once upon a time that's may be hamper development of a society as well as country. The intellectual peoples, professionals, academicians, managers and employers have to convey a generous mentality in every situation to solve any kind of problematic issue within & outside of an organization.

The problems may be predictable or unpredictable, certain or uncertain- intellectual persons need to have the attitude to solve any kind of problems of subordinates. Besides that more research can be conduct on the PSA in future from which educational, banking and other organizations will be benefited for sustainable development in Bangladesh.

Recently, leadership strategy has been changed enough then before. But an ideal strategic leadership is necessary for conducting organizational activities with speed and proper direction for the long lasting surviving of an organization. If the leadership is based on intellectual strategy then organization is guided and directed properly for facing the challenges in the complex & competitive working environment.

Intellectual Controlling is essentially applicable for maintaining an efficient & effective chain of controlling system for the subordinates by the concerned authorities in each of respective organization. Though the IC of educational sector is different from banking sector in some way, both sectors have to emphasize on equality-based IC in the particular area of working field.



An 'intellectual team' can be build-up for making intellectual decisions, solving predictable & unpredictable problems with emergent initiatives that may be involved with employees, students, customers or authorities; then definitely an organization will go forward with first performance than other competitive organization in Bangladesh.

Finally, more future research can be facilitated for developing the extensive literatures, theory and application of IM with effective SP, SI, CH, PSA, SL and IC as a way of forwarding for SD in the challenging & competitive situation of an organization in Bangladesh.

6.2 Limitations

Though in Bangladesh number of listed public and private Universities are 131 and the number of listed public and private Banks are 57, only 30 different organizations (12 Universities, 18 Banking organizations) have been used for data collection which are not enough to justify the maximum opinions of the respondents. Literature review on IM (with the components of IM) and SD is not so extensive which is another limitation of this paper.

6.3 Theoretical and Practical Implications

The study has been provided a great theoretical implications in the field of literatures and practical implications for professionals & intellectual managers, business leaders at the banking and other service & business sectors; academicians, researchers as well as teachers at the educational sector in Bangladesh. Additionally, practices of IM for SD is significantly applicable in case of agriculturist, economist, ecologist, sociologists and executive organizational concerned for facing challenges and forwarding a society as well as nation.

Conclusion

The study found a strong positive association between IM and SD and a significant positive influence of IM on SD with bivariate correlation and linear regression analysis of various variables of IM and SD which means organizations success depends on application and implementation of different initiatives of IM for SD in educational and banking sector in Bangladesh. Thus if the academical, professional and managerial activities performed with intellectual capabilities and initiatives, it may be possible to handle recent challenges and pitfalls efficiently by which sustainable development can be ensured in the society of Bangladesh as well as global.



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