3.1 Problem Identification

Discussion in section 2.3.6 highlights the fact that the issue pertaining to BS-HRMP perspective has to be addressed in an integrated manner encompassing the different dimensions of business strategy and the different aspects of HRM practices in terms of 'width' and 'depth'. Research carried out so far may be comprehensive, but limited to studies in developed economies. Further, majority of research has been confined within the restricted domain of business strategy or HRMP constructs. Further, the works are largely restricted within the domain of organisations having better performance or the one that are "most valuable". But an alternative research problem would be to consider how the relationship works in case of low performing organisations as well. The relationship may then be compared with high performing organisations. A study encompassing organisations of small, medium and large scale with varied financial performance might be useful. Further, there is need to understand the perspective in a better way in terms of organisation-specific studies. The organisation-specific studies need to incorporate the perception of employees, vis-à-vis BS-HRMP relationship. Additionally, in terms of continuation of previous research work, many of which had a restricted domain of business strategy as well as human resource management practices, there is scope to understand the perspective by improving the research construct and design. In the light of a well-structured research construct, the nature of BS-HRMP
relationship has to be analysed from different aspects in terms of different research questions like:

- To what extent do HRM practices vary with different business strategies?
- How is the above variation influenced by different control situations like ownership pattern, performance, industry categories?
- Whether variety in business strategies leads to a variety in HRM practices? To what extent?
- How is the variety in business strategies leading to a variety in HRM practices influenced by different control situations like ownership pattern, performance, industry categories?
- Whether organisations following similar business strategies have similar or different HRM practices?

Thus from a general point of view, the above aspects of BS-HRMP may be summarised and understood in terms of perspectives, varieties and proximities. In this context, the main research question that needs to be considered is whether and in what way HRM practices vary with business strategy which is similar to the works carried out in similar line (Sanz-Valle, 1999; Kandula, 2001; Fujimoto and Kimura, 2005).

As opposed to the general point of view, some of the organisation-specific research questions that need to be explored are:

- What are the issues involved in the strategic action orientation of specific organisations in emerging economies?
What are the organisational and environmental issues associated with it?

• How, in an organisation-specific situation, the relationship between business strategies and HRM practices can be comprehended?

• How do employees perceive the relationship between business strategies and HRM practices? Is there congruency or divergence vis-à-vis the opinion of management to this end?

3.2 Research objectives based on the identified problems

In the light of the identified research problem the following would be the research objectives:

• To assess the nature of relationship between specific business strategies and HRM practices perspectives

• To assess the nature of relationship between specific business strategies and HRM practices in different control situations: public-private sector; performance-high, moderate & low; industry-IT-ITeS, manufacturing, service & others

• To assess the nature of relationship between business strategy varieties and HRM varieties

• To examine the nature of relationship between business strategy varieties and HRM practices varieties in different control situations: public-private sector; performance-high, moderate & low; industry-IT-ITeS, manufacturing, service & others
• To assess the nature of relationship between business strategy proximities and HRM practices commonalties

• To assess nature of relationship in different company-specific situations encompassing the views of executives and primary and secondary sources

• To verify the nature of relationship in different company-specific situations on the basis of employees’ opinion.

3. 3 Hypotheses

3.3.1: In the light of the first two objectives, it may be explored whether significant relationship exists between business strategies and HRM practices. In other words, we may develop hypotheses which we may try to nullify by assuming that there is no significant correlation between business strategies and HRM practices. More specifically,

\( H_0: \) there is no significant correlation between \( i^{th} \) business strategy and \( j^{th} \) HRM practices.

Alternately, \( H_A: \) there is significant correlation between \( i_{th} \) business strategy and \( j_{th} \) HRM practices

This may be extended in different control situations: public-private sector; performance-high, moderate & low; industry-IT-ITeS, manufacturing, service & others

3.3.2: With regard to the second and third objective, effort may be taken to assess whether business strategy variety explains HRM variety and to what extent
In other words, we may develop hypothesis which we may try to nullify by assuming that there is no significant correlation between business strategies variety and HRM practices variety. More specifically,

$H_0$: there is no significant correlation between business strategy variety and HRM practices variety.

$H_A$: there is significant correlation between business strategy variety and HRM practices variety.

*The above may alternatively be stated as:*

$H_0$: business strategy variety cannot explain HRM variety.

$H_A$: business strategy variety can explain HRM variety

3.3.3 With regard to the fifth objective, effort can be taken to see whether proximities in business strategies are significantly associated with HRM practices. More specifically,

$H_0$: There is no significant association between strategic proximities and HRM practices commonalities.

$H_A$: There is no significant association between strategic proximities and HRM practices commonalities.

*The above may alternatively be stated as:*

$H_0$: Strategic proximities and HRM practices commonalities are independent

$H_A$: Strategic proximities and HRM practices commonalities are dependent

3. 4 Research Design

Any successful research rests upon an effective design of the research work. The design should be such that it tracks all the research questions that need to be answered. It also facilitates in developing a framework for collecting
and analysing data in the light of identification of “causal connections between variables” (Bryman and Bell, 2003:40). In the light of the present research intended to study the nature of relationship between business strategies and human resource management practices, the research design has been framed with a view to track the following:

- **Different aspects of business strategy as identified in sub-sections 2.1.7 & 2.3.6**

- **Different aspects of HRM practices in terms of width and depth as suggested in sub-sections 2.3.6**

- **Nature of relationship between business strategies and human resource management practices with the help of appropriate quantitative techniques**

- **Organisation-specific issues related to the BS-HRM practices**

- **Employees orientation vis-à-vis the company specific-issues related to the BS-HRM practices**

A closer examination of the above aspects highlights the need to pursue a two pronged approach for the present research agenda. The first one has to be directed towards a general understanding of BS-HRM relationship and the second one would carryout company-specific study on BS-HRM practices. Accordingly, the research strategy involving sampling technique, questionnaire construction, data analysis techniques, etc has to be formulated. The nature of the present research necessitates the need to employ both qualitative as quantitative research techniques to track all pertinent issues related to the research which is quite justified for carrying out research in HRM (Gerhart et
Therefore an ideal way of exploring into the problem would entail a combination of questionnaire survey coupled with case study as pursued by researchers like Jackson and Schuler (1992). Accordingly, the present research has been segregated into two parts, the first part involving the general understanding of the nature of relationship between business strategies and human resource management practices and the second part entailing organisation-specific studies on the same agenda for an in-depth understanding. The present research design approach is in line with Kandula’s (2001) approach and in the opinion of the researcher; it is an improvement upon the earlier research works carried out in the field. Since the two parts of the research entails two approaches, the research methodology has been segregated into the two parts and discussed separately i.e. Research Methodology for Part I (section 3.5) and Part II (section 3.6).

### 3.5 Research Methodology for Part I

As discussed above the first part of the research has been designed to understand the BS-HRM relationship with the help of questionnaire survey which is a frequently used technique in management research in general and HR research in particular. The employment of two questionnaires for understanding BS-HRM practices relationship is in line with the approaches of other related works in the field (Khatri, 2000; Kandula, 2001). The first questionnaire has been entitled “Strategic Action Orientation Questionnaire” (SAOQ) and the second one has been named “Human Resource Management Practices Questionnaire” (HRMPQ). These two questionnaires have to be designed in
such a way so as to identify and operationalise the multifarious variables under investigation.

3.5.1 Questionnaire Design

Design of Strategic Action Orientation Questionnaire

The first questionnaire (SAOQ) has been designed by considering major issues related to business strategy. This questionnaire has been designed with a view to identify (a) the major business strategies of organisations and (b) core areas of the organisation supporting the business strategy. These two comprise Part I and Part II of the questionnaire and are in line with the framework of Pearce and Robinson (2005) and synchronised with the discussion in sections 2.1.7 and 2.3.6. Additionally, a third part has been introduced in the questionnaire to accommodate certain aspects of the strategy of an organisation that cannot not be tracked in Part I and Part II of the questionnaire and also certain aspects of HR integration as perceived by the top management of an organisation. Thus, the questionnaire is holistic in nature in the sense, that it considers all major issues related to understanding business strategy and is therefore, an improvement upon earlier works and unique in itself. Thus, its effectiveness for studying BS-HRM Relationship is primarily established.

The Part I of the SAOQ comprises 19 items signifying different business strategies which are based on guideline available in existing literature as discussed in section 2.1.3. These are Stability, Concentration, Market Development, Product Development, Forward Integration, Backward Integration, Concentric Diversification, Conglomerate Diversification, Horizontal Integration, Cooperation Strategy/Business Alliance, Joint Venture,
Global Strategy, Outsourcing Strategy, Merger, Spin-Off, Acquisition, Harvesting, Divestment and Turnaround. Each strategy has been operationally defined in the questionnaire based on the way experts have explicated the strategies in the relevant literature used and cited in the present research. While majority of the strategy items are based on the guidelines available in the standard texts as cited in section 2, Spin-off, Global Strategy, Cooperation Strategy/Business Alliance, Outsourcing have been included and Liquidation which finds a place in almost all texts has not been considered since it has a negative connotation and doesn’t match the intent of the present research. Spin-off has been accommodated in the list because many organisations use it as strategic option (Krishnaswami and Subramaniam, 1999), Global strategy has been preferred in terms of its relevance in present day business (Tallman, 2000), Cooperation Strategy/Business Alliance signifies different forms of non-equity based cooperation/collaboration/alliance arrangements (Doz, 1996; Dyer and Singh, 1998), and these have been clubbed into a single approach in order to restrict the number. Finally, outsourcing has been considered as another item in business strategy in view of its relevance and wide acceptance (Thompson and Strickland, 2003). Respondents have been requested to give their opinion against each of the business strategy items on a scale of 1-5 in terms of the degree of implementation of a particular business strategy in the organisation (Kandula, 2001). The Part II of the SAOQ contains items that comprise the core areas of the organisation supporting the business strategy and has been adapted from Porter’s (1980: 40-41) concept of generic competitive strategy and Miles and Snow’s (1978, 1984) framework. The important and relevant items used in
the analyses of these two approaches have been considered in Part II and a comprehensive list of 25 items has been prepared and two additional items Reduction in Organisational Hierarchy/Delayering/Restructuring and Talent acquisition and retention have been included. The items considered in the list include achieving economies of scale, acquiring new customers, building and maintaining corporate reputation, better customer relationship, changing markets, changing product/service line, continuous search for product/service-market opportunities, diverse product/service line, flexibility in pricing/competitive pricing, low cost distribution, monitoring competitors' move, multiple technologies, new product development, undertaking operations in predictable markets, process engineering, product design, product/service quality, production efficiency, selling customised product/service, strong marketing capabilities, sustained capital investment, targeting a particular customer segment, tight cost control, reduction of some levels in the organisational hierarchy/Delayering/Restructuring, Innovation and Creativity, Research and Development and Talent acquisition and retention. Respondents have been requested to give their answers on a scale 1-5 signifying the degree to which they are important in the context of their respective organisation. The basic objective of the inclusion of items in line with Porter or Miles and Snow's approach is not to segregate organisation into strategic response groups like cost, innovation, quality etc but to see how these are related or relevant to the business strategies as core areas. Thus, the present research work has envisaged using the two concepts in a different way and thus it is unique from the approaches of earlier researchers.
The third part of the questionnaire contains 8 statements about the business strategy which are not covered under part I and Part II and are in line with Hax and Majluf's (1996: 36-37) approach of profiling strategy of organisations and 4 items related to the integration issues identified in the discussion of section of the previous chapter. In this case also respondents have been requested to give their opinion against each statement on a Likert-type Scale. The Strategic Action Orientation Questionnaire is exhibited in Appendix 1(a).

Design of Human Resource Management Practices Questionnaire

The second questionnaire viz. HRMPQ has considered all major aspects of human resource management and in all 163 HR items have been included in it. This questionnaire has been structured based on the guideline available in literature and in this perspective, works of Schuler and Jackson (1987), Sanz-Valle et. al (1999); Armstrong (2004), Deceozo and Robbins (2004), Gomez-Mejia (2004: 64-68); Guest et al. (2004); Michie and Sheehan (2005), etc. that provide an effective summarisation of HRM practices, and some other works as cited in chapter 2 have been considered. The first two items of the HRMPQ address the issue relating to awareness of HR executives about the business and the awareness generation among the employees which are significant since many organisations are emphasizing upon the concept of internal marketing (Dunmore, 2002; Michie and Sheehan, 2005). It then considers the issues of human resource planning and job analysis (Armstrong, 2004). The emphasis on different sources of recruitment has been considered in item 5 (Budhwar and Khatri, 2001). The current trend in employment highlights the different forms of employment and accordingly the different forms of employment have been
considered in item 6. Again, the way tasks are organised is important in present-day organisations and this has been referred to as work flows and in this category the different relevant items have been accommodated (Gomez-Mejia et al., 2004). Coming to the question of selection, different issues have been included in the questionnaire (Michie and Sheehan, 2005). Following this, the prevalence of human resource information system has been considered in the next item. Then, the objective of induction programme encompassing a variety of issues has been considered in item 10 (Armstrong, 2004: 454-455). Training being an important activity of an organisation makes it imperative to understand the different aspects of training practices prevalent in organisation. In this perspective, aspect relating to identifying training needs (item 11), types of training imparted (item 12, based on Zenke, 1982), evaluation of training (item 13, based on Kirkpatrick, 1994) and different focus areas of training (item 14, based on Schuler, 1987) have been considered. Another important area in the context of HRM practices is performance appraisal and management. In this perspective based on the guidelines in literature (DeCenzo and Robbins, 2004; Mondy and Noe, 2005 and some other literature) items encompassing employees' opinion in developing performance standard (item 15), coverage of performance appraisal (item 16), relevance of different issues and areas of performance appraisal like individual/team based, flexibility, rating methods (item 17), areas where results of performance appraisal are used (item 18) and person responsible for carrying out performance appraisal (item 19). Following this, issues like internal career opportunities, employment security, assessment centre/development centre and
succession planning and empowerment have been considered (items 20-26, based on Hale and Whitlam, 2000; Budhwar and Khatri, 2001; Gomez-Mejia et al., 2004; Michie and Sheehan, 2005). Certain aspects relating to job design that signifies how works are organised in the form of tasks have been considered under items 27 & 28 (Armstrong, 2004; Gomez-Mejia et al., 2004; Mondy and Noe, 2005). Reward and Compensation are considered vital aspects of HRM and a number of issues need to be considered in order to have a comprehensive understanding of the area. In this context, criteria used for reward and types of reward have been considered in items 29 & 30 (DeCenzo and Robbins, 2004; Mondy and Noe, 2005). The importance of profit-sharing/gain sharing/employee share ownership is highlighted in existing literature and are considered to be an integral component of HRM practices and accordingly has been accommodated in item 31 (Huselid, 1995). Under compensation as HRM practice, effort has been to track the various compensation policies and compensation objectives (item 32 & 33) relevant to organisation (Milkovich and Newman, 2005: 205-209). Then, foci of benefit components and employee assistance programmes have been considered in item 34 (Mondy and Noe, 2005) followed focus of incentive plan in item 35 (Dessler, 2004; Armstrong, 2004). The importance of attrition and employee turnover and exit interview calls for the need to have a structured policy for their control and this has been accommodated in items 36 & 37. The importance of employee voice and consultation is recognised in contemporary literature and the degree to which works committee, joint consultation, suggestion scheme, quality circle and employee involvement are prevalent in organisations has been considered in 38
(Davis and Lansbury, 1996; Armstrong, 2004; Dundon, et al., 2004). Other related aspects like employee attitude/employee satisfaction survey (Armstrong, 2004), employee encouragement for product/process improvement (Michie and Sheehan, 2005) and employee recognition and award (Gomez-Mejia et al, 2004) have been considered in items 39, 41 and 42 respectively. Again the different issues in the context of organisation's communication (Armstrong, 2004; Gomez-Mejia et al, 2004) system have been included in item 40. The last category of HRMPQ contains items related to the governance issues (Gomez-Mejia et al, 2004) within organisations. These include collective bargaining (item 43), principles of administering discipline (item 44) (DeCenzo and Robbins, 2004: 484-485; Mondy and Noe, 2005). Varieties in the context of principles of employee relations (Armstrong, 2004), management approaches vis-à-vis grievance procedure (Monappa, 1999), and labour relations strategy (Gomez-Mejia et al, 2004: 550-553) have been considered under items 45, 46 and 47 respectively. In present-day business, employee separation finds a significant place in literature and in this perspective, the choices vis-à-vis employee separation have been considered (Gomez-Mejia et al, 2004: 66). Finally, the issue of change which is relevant in the present perspective has been considered in item 49 (Armstrong, 2004).

Items in the HRMPQ have been structured in a way so as to obtain response on a Likert type scale of 1-5. Some of these are in the form of statements and some are in the form of sub-items. The objective is to track the prevalence or relevance of items/practices that have been converted into statements or to go deeper into several aspects/sub-items related to a particular item/practice. This
ensures coverage in terms of ‘width’ and ‘breadth’. Application of Likert-type scale is observed in a number of research works in the field (Sanz-Valle et al., 1999; Khatrì, 2000). Moreover, the advantage of this scale, wherein “scores of items of such scales are summed, or summed and averaged” (Kerlinger, 1973) can be utilised in addressing some of the research questions identified above. Again as Kelly (1999) avers Likert scale helps researchers to “ascertain if respondents’ opinions change from survey to survey by comparing means, reviewing trends, and performing statistical analysis”. The HRMPQ is exhibited in Appendix 1 (b).

The guidelines available in existing literature have been used in developing the content of the questionnaires and subsequently pre-testing and pilot survey have been considered (Malhotra, 2007). The initial drafts of both the questionnaires have been pre-tested with a group of selected experts on the basis of convenience in order to increase the precision and clarity. On the basis of suggestions received, both the questionnaires have been modified which improved the quality.

3.5.1 Reliability and Validity

Literature suggests that the effectiveness of a measurement should be judged in terms of reliability which is the degree of consistency within the measurement and will therefore give the same results each time it is administered to the same person in the same background (Kelley, 1999; George and Mallery, 2006). For the present research, reliabilities of both questionnaires have been measured through Cronbach’s alpha (also known as coefficient alpha) which is an extensively used measure and is measured on a same scale a Pearson correlation
coefficient (George and Mallery, 2006:222-223). A value closer to 1.00 indicates more reliability of the measure.

Validity refers to the “degree to which the data support the inferences that are made from the measurement” (Kelly, 1999). Simply stated it assesses whether or not a measure is measuring what is supposed to be measured and is often considered as the “most important criterion of research” (Bryman and Bell, 2007). In the perspective of the present research, face validity is ensured since it “reflects the content of the concept in question”. The face validity of the questionnaire has been established since the items of both the questionnaires are based on literature in the field as cited in the previous sub-section and experts’ opinion has been taken to test whether they reflect the concepts (Bryman and Bell, 2007: 165).

3.5. 3 Database and Sampling Design

As already discussed, the first part of the present research work has been aimed at having a general understanding of the nature of relationship between business strategies and human resource management practices of organisations. For this, effort has been taken to locate organisations across diverse industries with varied degrees of performance. In order to carryout this endeavour, two databases that are widely used in India i.e. Capitaline (Published and marketed by Capital Market Publishers India Ltd) and Prowess (Published and marketed by The Centre for Monitoring Indian Economy) have been used. Further, important reports and publication highlighting names of West Bengal-based
organisations have been used\textsuperscript{4}. The basic objective of using two databases and important reports is to expand the size of the population and to minimise possible exclusion of organisations on the basis of the identified criterion. An initial list of organisations that are either registered in West Bengal or having headquarters in West Bengal or having an operational unit in West Bengal have been considered for the first part of the study (as on 31.03.2006). The selection of West Bengal-based organisations rests upon two justifications namely, for getting better response due to geographic proximity and West Bengal being one of the leading states in India in terms of per capita income, preferred manufacturing and IT destination, industrialisation, new investment, etc. On the basis of the identified criterion, a list of organisations has been prepared. A closer examination of the list reveals that although it comprises some renowned organisations, the emerging sectors are not adequately represented. Hence, this list has been referred to as the \textit{traditional category}. This category comprises 2453 organisations. With a view to overcome the limitation of this category, effort has been taken to include the organisations in the emerging sectors to give a complete shape to the database. For this, first organisations in the IT/ITeS sector having units in West Bengal have been included and the list has been prepared on the basis of information available from \url{www.kol.stpi.in/our-member-unit.html} and \url{www.itwb.org} and some other secondary sources. Further, effort has been taken to include organisations in the other emerging sectors like insurance, telecommunications, private sector banks, retail houses, 

\textsuperscript{4} Indian States, Economy and Business: West Bengal, A Report by PricewaterhouseCoopers on behalf of IBEF, Published by India Brand Equity Foundation, available from \url{www.ibef.org}, \url{http://www.pppinindia.com/key-players-west-bengal.asp}, \url{http://www.wbidc.com/overview/mega_projects.html#}
health care/hospital, media and entertainment, hospitality and real estate and relevant information has been obtained from reliable sources like www.irda.org, www.myiris.com, capitaline database, etc. On the basis of this perspective, an additional list of organisations in the emerging category has been prepared and there are 643 organisations in this category. Effort has been taken to see that only those organisations that have operational unit in West Bengal are considered so as to maintain consistency with the first category. A closer look at both the lists reveals that there are some renowned organisations like Tata Steel, ITC, Haldia Petrochemicals, NTPC, SAIL, Wipro, etc in the list. Organisations like Aditya Birla Group, Eureka Forbes Limited, Pantaloon Retail India Limited etc. that figure in Hewitt Associates (2007) are present; and TCS, Tata Steel, ITC that are included in the list of Asia's 50 best performing organisations compiled by Business Week also figure. Again organisations like NTPC Limited, Aviva Life Insurance Company India Ltd. that are in the list of Best Place to Work also figure as well. On the basis of the two categories identified above, the sample for the present study has been ascertained following proportionate stratified random sampling approach. This process yielded 309 organisations and these make up the sample for the present study. Data on sales (Rs.Crores) as on 31.03.2007 have been collected from the two databases (Capitaline and Prowess) used for the purpose and in case the sales

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5 http://timesofindia.indiatimes.com/India/12-Indian-companies-among-Asias-best/articleshow/2352278.cms


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figure was not available, effort has been taken to obtain the same from secondary data source like website of the organisation and Internet.

3.5.4 Data collection

The two sets of questionnaires (SAOQ and HRMPQ) designed for the purpose have been sent to the Managing Directors /Regional Heads and HR heads of the organisations respectively in the selected sample. Suitable alternatives including line managers, other HR executives, have also been requested to fill-in the questionnaires. With a view to get better response, multiple way of data collection ranging from mail to web-based questionnaire response has been used to get better response. While postal communication has been made for the organisations in the sample set, parallel methods involving personal visits and web-based response have also been used. Both the questionnaires have been hosted online at www.mbahr.buruniv.ac.in/actionsurvey.html and www.mbahr.buruniv.ac.in/HRsurvey.html respectively. Since it contained the name of the university where the researcher is currently registered, it provided credibility.

3.5.5 Statistical tool for analysis of data

The responses to the questionnaires have been entered and statistical analysis has been carried out using Statistical Package for Social Science (SPSS) version 13 to facilitate effective inference. Based on the research objective and hypothesis, appropriate statistical tools that would best answer the research questions have been considered.
The statistical tools used to arrive at research findings are discussed below:

To assess the nature of relationship between specific business strategies and HRM practices perspectives

With a view to understand the nature of relationship between specific business strategies and HRM practices, correlation analysis has been preferred. The utility of correlation analysis is its simplicity and ease of understanding. Further researchers in the field of HRM have extensively used it in order to come to meaningful conclusion (Chadwick and Cappelli, 1999; McCracken and Wallace, 2000; Harris and Ogbonna, 2001; Michie and Sheehan, 2005). Significant correlation coefficients (Pearson) between each of the business strategies and the core areas as mentioned in part II and other areas including integration issues as mentioned in Part III of SAOQ have been ascertained.

Further, the nature of relationship between each of the business strategies and Human Resource Management practices has been identified from the SPSS output table. In order to synchronise the analysis with the integrated view of the strategy, an effort has been taken to assess the nature of relationship between the significant core areas, other areas and integration issues with the different areas of HRM practices that are relevant to different each business strategy. In the analysis, a 10% level of significance has been considered with a view to have liberal understanding of the nature of BS-HRMP relationship (Bernard, 2000). The results have tabulated in Appendix. III (a). It is worth mentioning here that a deliberate effort has been taken to employ both Pearson’s correlation and Spearman’s rank correlation to assess the nature of relationship.
Assessing the nature of relationship between business strategy perspectives and HRM practices perspectives in different control situations like in terms of correlation analysis

The same exercise as discussed above has been repeated in different control situations: public-private sector; performance-high, moderate & low; industry-IT-ITeS, manufacturing, service & others. On the basis of the values of significant values of correlation coefficient, the difference in the nature of BS-HRMP relationship has been examined in each of the control situations and compared with the strategy-wise relationship from an overall perspective. However in order to restrict the analysis within a manageable limit, the first five business strategies (based on highest mean scores) and the different HRM practices and core areas have been considered under each category of control situations. On the basis of available sales data, the responding organisations have been segregated into three categories low performing (upto Rs100 crore sales), moderate performing (between Rs. 100 to Rs. 1000 crores sales) and high performing (more than Rs. 1000 crores sales). It is worth mentioning here that literature highlights that sales can be considered as an important parameter of organisational performance (Ansoff et al., 1970; O’Regan and Ghobadian, 2004).

Assessing the nature of relationship between business strategy varieties and HRM varieties in terms of linear regression analysis in general and in different control situations

As a second approach towards understanding the nature of relationship between business strategies and HRM practices, an effort has been taken to understand
whether varieties in business strategies can explain varieties of HRM practices. In terms of the response to HRMPQ and SAOQ, the organisation-wise mean values corresponding to different items of both the questionnaires have been determined on a scale of 1-5. For each organisation, the mean values of business strategy items (Part I of SAOQ), core area (Part II of SAOQ) and HRM items (HRMPQ) have been computed. Thus an aggregate value of 5 or close to 5 would mean that there is maximum variety of business strategy or core areas supporting business strategy or HRM practices as the case may be, while a value of 1 or close to 1 would denote minimum variety. So there can be any value between 1-5 for the different varieties corresponding to a particular organisation and that value would denote the degree of variety. Business strategy varieties, core area varieties and human resource management practices varieties have been denoted as BSV, CAV and HRMPV respectively. As already assumed in the research construct, BSV and CAV are likely to have high correlation and this can be tested through Bartlette’s test of Sphericity (Hair et al, 1998). In case the result of Bartlette’s test of sphericity is significant which signifies correlation, between BSV and CAV, there is need to consider jointly by a linear combination of BSV and CAV through Principal Component Analysis (PCA) (Koutsoyiannis, 1977: 425). Neglecting this would lead to multicollinearity problem. In case the result of Bartlette’s test of sphericity is insignificant, the two sets of variables need to be considered separately. Since we are to analyse the causal relationship between dependent variable and independent variable(s), there is need to carry out regression analysis. For this purpose, the standard procedure would be to carryout linear regression analysis
LRA) which will lead towards the establishment of linear causal relationship between the variables under consideration. This causal relationship has also been verified under different control situations. Application of regression analysis has been observed in contemporary literature on HR research (Budhwar, 2000; Khatri, 2000; Singh, 2004).

Assessing the nature of relationship between business strategy proximities and concomitant HRM imperatives in terms of cluster analysis coupled with Chi-Square test.

A third approach aimed at understanding the BS-HRMP relationship is to ascertain whether organisations pursuing similar business strategies have similar or different HRM practices. Similar business strategies have been referred to as business strategy proximities. For this, cluster analysis (Malhotra, 2007: 670-671) has been carried out through hierarchical clustering technique (a procedure involving “development of hierarchy or tree-like structure”) involving agglomerative clustering method (a procedure in which each object starts out in a separate cluster and formation of cluster by grouping objects). In this procedure linkage method has been preferred which involves computation of distance between clustered objects and finally average linkage (linkage method involving “average distance between all pairs of objects, where one member of pair is from each of the clusters”) has been employed for the purpose. Since the number of clusters is unknown, on account of unsupervised data, hierarchical clustering technique has been used to get an idea about the number of clusters to be used. Once this has been done K-Mean clustering (Johnson and Wichern, 2007) has been employed to identify the strategic proximities. Based on the
cluster analysis, proximity matrix of the business strategies has been developed which has yielded 5 major clusters of organisations having strategic homogeneity, here referred to as business strategy proximities. The basic characteristic of these clusters is that there is homogeneity within clusters and heterogeneity between clusters. On the basis of this, a joint distribution of two variables wherein the identified 5 major clusters have been considered as one variable and each of the areas of HRM practices as another. With a view to test whether common HRM practices are followed by organisations pursuing similar business strategies, Chi-square test has been employed to test the association between the two variables.

3.6 Research Methodology for Part II

Based on the conviction, that half of the research problem might be answered through Part I of the analysis, the later half has been directed to address the unanswered areas. Following the arguments of renowned researchers (Schneider and Schmitt, 1986; Schuler and Jackson, 1992) it can safely be said that “case intensive research” is useful to track some research questions. Moreover, any study on BS-HRMP relationship needs “a holistic, in-depth investigation” for which case study is best suited and that case studies help the researcher to consider “not just the voice and perspective of the actors, but also of the relevant groups of actors and the interaction between them” (Tellis, 1997).

Literature suggests that multiple case study designs are becoming popular in management research (Bryman and Bell, 2003). In the light of this perspective, an effort has been taken to carryout “case intensive research” in line with the identified research problem in the right perspective. The organisations selected
for the study are Acclaris Business Solutions Pvt. Limited, Durgapur Projects Ltd and Haldia Petrochemicals. The basic objective has been to collect relevant about the three organisations Stake’s approach (1994: 242) of “spending substantial time, on site, personally in contact with activities and operations of the case, reflecting, revising meanings of what is going on”. However, with a view to have a more rigorous understanding of the issue, the term organisation-specific study has been preferred instead of case study.

Justification for selecting the three organisations

All the three organisations are based in West Bengal but are unique in terms of unit of study with respect to the current research problem. Furthermore, another point that has been considered following Tellis’s (1997) approach is “selecting cases must be done so as to maximise what can be learned in the period of time available for the study”. Acclaris Business Solutions Pvt. Limited belongs to the Information Technology/Information Technology enabled Services (IT/ITeS) sector which is assuming a significant place in emerging economies like India and the sector has made significant contribution towards the development of the emerging economies in terms of its impact on the gross domestic product, its capacity to absorb human resource (HR), its ability to provide greater accessibility of innovative technology worldwide and as a source of “standardization” and “increased variety” in operation of markets and industry structure (Globerman et al., 2001). Thus, it makes it imperative to undertake research in organisations in this sector. However, there is an urgent need to go beyond the common approach of studying “most valuable” ones. Further, although being in the SME segment, Acclaris is in news because of being
awarded "Great Place to Work" and therefore the need to look into the aspect of BS-HRMP relationship which possible is embedded in the "Great Place to Work" perspective.

_Durgapur Projects Limited_ has been selected because it is a state level Public Sector Undertaking (PSU) on one hand and has made a successful turnaround followed by growth in the post turnaround phase. It would be imperative to look into the different dimensions of the BS-HRMP relationship in this organisation more so because it happens to be a state-level PSU that has effective strategised in the post-liberalisation phase.

_Haldia Petrochemicals_, an organisation in the sunrise sector, is the largest venture in eastern India and a distinctive example of public private partnership that includes the Government of West Bengal as an important stakeholder. Often viewed as a prestigious and dream project in West Bengal, it is a considered as a "jewel in the east". This makes it unique among the enterprises of West Bengal and therefore tempts the researcher to study its strategic action orientation and the BS-HRMP relationship.

In line with the research problem identified earlier, an attempt has been made to formulate a research scheme in order to understand the following issues for each organisation:

- _The organisation and its environmental imperatives_
- _Strategic action orientation of the organisation_
- _Relationship between business strategies and human resource management practices_
Employees' line of orientation vis-à-vis business strategies and human resource management practices relationship

A standard scheme of analysis has been developed to carry out the organisation-specific study in each of the organisation. Information about the organisations under study has been obtained from different sources like company website, available annual reports, publication and documents of the organisation, other data sources and information available in the Internet (annual reports for Acclaris were not available). In this context it would be worthwhile to mention that the utility of annual reports for understanding the strategy of the organisation is widely recognised in literature (Bowman, 1984). The various sources have primarily been used to understand the organisational and its environmental imperatives as also the strategic action orientation of the organisation. Further, semi-structured interviews (Kvale, 2007) with the Managing Director and/or Line Managers have been conducted to comprehend the strategic action orientation of each organisation under study. Based on guidelines available in literature (Tyson, 1995) the following issues have been covered in the interview:

- Organisation: History, governance structure, major milestones, mission/vision and priorities, distinctive capabilities
- Important environmental influences: market, major customers, competitors, regulatory changes, etc
- Important changes in recent past
- Performance and production trends
- Business strategy: salient features, important influences and considerations, recent changes, etc
- Organisational culture, technology, HRM etc and their relationship with the business strategy.

Executives interviewed have been requested to explicate on the issues identified from the response to the strategic action orientation questionnaire and the different sources stated earlier. These helped to develop an integrative view of the different aspects of the organisation and accordingly the three sub-units: organisational profile, important environmental influences and strategic action orientation have been complied. The end result of the exercise carried so far is to identify the business strategy of the organisations. Moreover, the information collected up to this stage has been used as a foundation towards understanding the BS-HRMP relationship in the organisations under study. The next question that has been targeted is to analyse the different aspects of the linkage of HRM practices with the different aspects of business strategy. In this context, the research question is: in the light of the different areas of the business strategy/strategies of the organisation, what are the related areas of HRM and to what extent the strength of this relationship can be assessed qualitatively. For this, interviews with HR Managers, other HR executives, line managers and trade union leaders (only in relevant case) have been conducted. The different dimensions of the business strategy of the organisation as identified earlier have been explained to the executives and they have been requested to give their opinion about the related HRM practices. Necessary explanation has been sought from the HR executives and they have been requested to provide
necessary data related to the identified HRM areas. Based on the interview outcomes, documents available like HR Manual, publications, reports and data the relevant to understanding the pertinent HRM practices have been thoroughly analysed. This gave shape to the section aimed at analysing the human resource management practices. This approach finds support in existing literature (Lawler and Siengthai, 1997).

*Employees' line of orientation vis-à-vis business strategies and human resource management practices relationship*

In the last phase of the organisation-specific studies, effort has been taken to see how employees perceive the BS-HRMP relationship. The basis rationale and approach is in line with the discussion of section 2.3.6. In order to pursue the exercise, the important strategy items as identified earlier, the related HRM items that have been identified have been broken down into operational statement that employees would be able to understand (Boswell, 2006). For each of the organisations under study separate questionnaires have been developed which have been named as “Employees Line of Orientation” in line with Boswell’s (2006) approach of “line of sight”. The questionnaires contain *common items* (generic items) that are considered to be relevant for understanding the context and *organisation-specific items* emerging from the BS-HRMP relationship analyses carried out organisation-wise. The common items include areas like effort to generate awareness amongst the employees about the organisation’s financial position, industry trends, stakeholders’ needs, cost etc., clear linkage between the work performed and organisation’s sustainability, physical working environment, agreement with organisation’s
personnel policies, opportunities to develop skills, talent and career in organisation, reward and compensation, etc which have been considered to be *generic* for understanding the line of orientation in a better way. Since these are based on existing literature, the content validity has been ensured. As already discussed, the specific items have been derived from the analysis carried and these have been verified on the basis of experts' opinion wherein 2-3 HR Managers/Executives have been requested to give their opinion.

Background variables encompassing designation, department, length of service of the employee, gender (only in case of Acclaris since in the other two organisation number of female employees is negligible), educational qualification have been accommodated in the questionnaires. Respondents have been requested to give their opinion on a Likert-type scale of 1-5. The reliability of the each questionnaire has been measured and the results have been discussed in the relevant section of the three organisation-specific studies.

The three organisation-specific questionnaires have been administered to the employees of each organisation. For ease of getting response and to minimise the time requirement, a sample size of 100 employees per organisation has been decided. For Acclaris, employees have been selected randomly on the basis entire employee list. For DPL and Haldia petrochemicals, employees have been selected from 2-3 units from of each organisation.

*Statistical tools used for understanding employees' line of orientation*

The responses to the employees' line of orientation have been entered and statistical analysis has been carried out with the help of SPSS software. First, mean score and standard deviation of the different items have been determined.
From an overall perspective, the areas where high, moderate and low orientation has been observed have been identified. Furthermore, with a view to understand the overall as well as background variable-wise orientation in an effective manner, principal component analysis (PCA) of orientation items including orthogonal rotation has been carried out. However, PCA has been used for a different purpose here which is to calculate the line of orientation on the basis of weights (importance) of different principal components through the analysis. Weights (importance) have been determined using the following formula:

\[ \frac{\lambda_i}{\sum \lambda_i} \]

where \( \lambda_i \) stands for Eigen Value of the \( i^{th} \) identified principal component; this has been considered to be equivalent to \% of Variance in terms of cumulative \% of Variance of the identified principal components (Koutsoyiannis, 1997).

The steps that have been followed here are: carrying principal component analysis—determination of number of principal components—determination of weights of each component following the formula stated above—clubbing of items and determination of their combined mean corresponding to each principal component—multiplying the combined mean of items under each principal component with their respective weights—summation of these values corresponding to different background variables—ascertaining the weighted line of orientation of different categories. It makes sense to calculate the weighted line of orientation using PCA rather than simple mean because it enables the researcher to assign importance to certain factors on the basis of employees' opinion.
Finally, effort has been taken to ascertain whether significant difference in line of orientation of employees exists on the basis of different categories of background variables. For this the following general hypothesis relevant for the different groups under each background variable has been drawn and tested:

\[ H_0 : \bar{u}_1 = \bar{u}_2, \text{ against } H_A : \bar{u}_1 \neq \bar{u}_2 \]

Where \( \bar{u}_1 \) : mean values corresponding to a particular item of group 1, \( \bar{u}_2 \) : mean values corresponding to a particular item group 2.

Non-parametric tests Mann-Whitney and Kruskal-Wallis have been employed on the basis of number of groups corresponding to each background variable. In case of Kruskal-Wallis,

\( \bar{u}_j \) : mean value of a particular item for group j corresponding to different background variables has been considered and tested.