

# HUMAN RESOURCE MANAGEMENT PRACTICES IN SHIPPING COMPANIES

## A STUDY

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**T**HE need of organizations for people and people for organizations will be more difficult to satisfy in the today's competitive business environment. Firm's competitive advantage could be generated from human resources (HR) and firm performance is influenced by a set of effective HRM practices. In this study, we intend to assess the HR practices in shipping companies. Primary data based on 250 observations from 125 shipping companies was analyzed to bring out the human resource management practices practiced in shipping companies. Factor analysis brought about five factors, which were further analyzed. Two factors namely 'training and performance appraisal' and 'hiring and compensation system' emerged very strong HR practices followed by 'career development'. 'Job analysis and HR planning' was moderately practiced in shipping companies. 'Workforce diversity and flexi-work system' also showed presence but did not emerge as strong practice.

**Keywords:** Human Resource Management, Shipping Companies, HRM.

## Introduction

The economy has transitioned to what some call 'The Age of Information' - an economy in which gross domestic product is increasingly dominated by services. Services permeate every aspect of our lives. We use transportation services; restaurant services; hotels; electricity and telephones; postal, courier and maintenance services; services of hairdressers; services of public relations and advertising firms; lawyers; physicians; dentists; stockbrokers and insurance agents; movie theatres; and swimming pools and Disney-style theme parks (Bateson and Hoffman, 1999). When we do buy goods, such as new car or a washing machine, we often still rely on services to keep them running and repair them when they break down. Services allow us to budget our time as well as our money (Bateson and Hoffman, 1999).

"The twentieth century was the age of machine; the twenty-first century will be the age of people" (Kanter as in Kermally, 2006). Buzzwords like globalization, empowerment, cross functional teams, downsizing, learning organizations and knowledge workers are changing the way of life of managers and the way they manage people (Kermally, 2006). The shipping industry is a prime example of a globalized industry now attached loosely to national sovereignties. Shipping differs from other examples of global business, such as fast-food chains and the auto companies, in that its physical capital is itself movable in a way that a burger kiosk or car plant is not. Due to this feature of the industry, strategic and human resource management has a mobile dimension not shared by the general run of manufacturing and transport industries (Klikauer and Morris, 2003). Advancing globalization, more flexible tax regimes and an increasing mobile workforce are creating opportunities and challenges for the shipping industry.

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New corporate strategies and processes are required to deal with an industry which is being reshaped through market consolidation and shifts in the balance of world trade ([www.pwc.com/transport](http://www.pwc.com/transport)).

Managing people is not a matter of manipulation. It is about working with your staff and colleagues (human resources) on a partnership basis to achieve the strategic goals of the organization (Kermally, 2006). The most important contribution management needs to make in the 21<sup>st</sup> century is to increase the productivity of knowledge work and knowledge workers (Drucker, 1999). Human beings are not bulk goods. They come in different shapes and forms. To attract and retain people, we have to treat them as individuals. Today's employees are more questioning and demanding. They are confident enough to air their concerns, grievances and aspirations. Brainpower dominates modern organizations. It is their essence. We are increasingly competing on competence. People can make your organization, your products and your service solutions unique. How you manage and lead people and how you organize your operations, determines whether you succeed (Thite, 2004) and there is only one valid definition of business purpose, i.e., to create a customer (Drucker, 1974). Excellent companies are close to their customers; other companies talk about it and the excellent companies do it (Peter and Waterman, 1982). One must define one's business not in terms of product made or sold but in terms of what needs of the customer are satisfied, i.e., in terms of what service is provided to the customer (Levitt, 1960).

## **Literature Review**

Shipping is one of the safest and most environmentally benign modes of transport ([www.marisec.org/flag-performance](http://www.marisec.org/flag-performance)). Much of the attention in services has been found on the professional, financial and telecommunications areas. Sometimes forgotten is the fact that the physical transportation of goods in international trade is itself a service (White, 1988).

In the last half century, the shipping industry has experienced a massive expansion in demand reflecting the growth in volume of seaborne trade, a growth to which technology has responded with, for example, the introduction of containerization and gas-carrying capacity. There have also been changes in the organizational structure with the appearance of management companies, and the extension of 'flagging out' and 'second registers' (McConville, 1999). Movements combined with changes in regions where the recruitment of seafarers took place from their home nation to be put onto an international recruiting basis, with the development of the Asian labour market. Despite all these comparatively rapid and profound changes in the industry, labour is the primary factor of production and is still organized on board ship on the basis of a steep hierarchical structure of officers and ratings- a construction that developed from the changeover from sail to steam propulsion half a century or more earlier (McConville, 1999).

During the last decade or so, *force majeure* events have directed the shipping industry to focus on its sea-going manpower. The on-going issues have been both concerned with quality and quantity of seafarers. These concerns have been reflected in the increasing amount of academic work and international legislation on the so-called 'human factor'. However, there are still many facets of it that have not been explored and that might give a better understanding of the maritime manpower system (Obando-rojas, Gardner and Naim, 1999). Competitiveness in many sectors of the maritime industry may be achieved through the efficient and effective organization of a firm's economic resources. Neo-classical economic theory suggests that these resources include land, labour and capital (Panayides and Gray, 1999). Effective human resource practices lead to competitiveness.

Job analysis is the process of obtaining information about jobs i.e. information about the tasks to be done on the job, as well as personal characteristics (education, experience, specialized training) necessary to do the tasks. Job analysis are essential for sound HR management as they provide a deeper understanding of the behavioral requirements of jobs in turn creating a solid basis to make job-related

employment decisions (Cascio, 1998). Change in profile of jobs is happening speedier than in the past and absence of job analysis data can cost organizations dearly. Hence, job analysis exercise should be conducted at regular intervals (Kandula, 2004). The process of analyzing and identifying the need for and availability of human resources for organization to meet its objectives is human resource planning (Mathis and Jackson, 2004). Human resource planning is not only concerned with 'hard issue' of acquiring the right number of personnel but also with the 'soft issue' of quality of manpower including creativity, innovativeness, flexibility, risk taking and problem solving (Prasad, 2005).

Recruitment is a form of business competition. Just as corporations compete to develop, manufacture, and market the best product or service, so they must also compete to identify, attract, and hire the most qualified people. It demands serious attention from management, for any business strategy will falter without the talent to execute it (Cascio, 1998). Recruitment and selection occupy attention of employers since these activities involve: (a) addition of manpower and hence, and (b) additional cost (Prasad, 2005). The step immediately succeeding the selection is 'placement'. Placement refers to the actual procedure wherein an individual is assigned with a job. It also involves assigning a specific rank and responsibility to an employee. This decision is taken after matching the requirements of a job with the qualification of a candidate (Jyothi and Venkatesh, 2006). Socialization is the process by which an individual learns to appropriate the values, abilities, expected behaviors, social knowledge essential for assuming an organizational role and for participating as a member of the organization (Jyothi and Venkatesh, 2006).

Companies must develop customer-oriented workforce to deliver service quality. After hiring the right people with the right attitude, companies must train them for the purpose (Kundu, 2000). For providing quality service, employees need ongoing training in the necessary technical skills and knowledge and in process or interactive skills. Training might take a variety of forms in organizations but all must view it as an important investment for future success (Zeithmal and Bitner, 2004).

Performance is defined as the record of outcomes produced on a specified job function or activity during a specified time period (Bernardin and Russell, 1993). Performance management isn't just a once-a-year assessment; effective managers incorporate performance review and feedback as part of their day-to-day communications with employees (Webb, 2004). Performance appraisal can identify employees who should be retained, and a pay-for-performance compensation plan can be applied appropriately to reward and encourage high and average performers to remain with the company (Berry, 2004). Appraisals continue to be used widely, especially as a basis for tying pay to performance (Schellhardt, 1996; Cleveland, Murphy and Williams 1989).

If competencies are the wheels for managing knowledge work, rewards (both extrinsic and intrinsic) are the engine (Kochanski and Risher, 1999). Compensation is the foundational rewards that are primarily financial in nature and satisfy financial needs for income (WorldatWork, 2000). Rewards bridge the gap between organizational objectives and individual expectations and aspirations. Effective, organizational reward systems should provide four things: a sufficient level of rewards to fulfill basic needs, equity with the external labor market, equity within the organization, and treatment of each member of the organization in terms of his or her individual needs (Lawler, 1989). A fringe benefit is an indirect reward given to an employee or group of employees as a part of organizational membership (Mathis and Jackson, 2004). On account of their enormous costs and the financial commitment which is made for the future, benefits planning has become a critical component of HR planning processes (Bernardin, 1993). The application of skill or competence leads to performance and performance is the criterion for evaluating effectiveness. Therefore, a pay-for-competence program enhances productivity and product quality, reduces absenteeism, turnover, and accident rates (Jyothi and Venkatesh, 2006).

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A Human Resource Information Systems (HRIS) is defined as interrelated components working together to collect, process, store and disseminate information to support decision making, coordination, control, analysis and visualization of an organization's human resource management activities (Laudon and Laudon, 1998). HRIS is an integrated system designed for providing information used in HR decision making (Mathis and Jackson, 2004). It is a system used to acquire, store, manipulate, analyze, retrieve, and distribute information related to company's human resource (Kavanaugh, Guetal and Tannenbaum, 1990).

Because of the increasing numbers of working mothers and two-income households (Cook, 1987; Hall and Richter, 1988), organizations have become more interested in assisting individuals to deal with conflicting demands between their work and family roles. Employers are beginning to realize that individuals may experience role conflict and difficulties in dealing with travel, child care, household tasks, and job transfers, and may have trouble in setting priorities for their various roles and responsibilities (Greenhaus, 1987; Lobel, 1991). This may be especially true for dual-career couples because of their high levels of career commitment. Work-life balance is a state where an individual manages real or potential conflict between different demands on his/her time and energy in a way that satisfies his/her needs for well being and self-fulfillment. People who wish to be fulfilled, need to allocate time and consideration to: themselves (me-time) i.e. recharging their batteries, taking care of their own physical and emotional needs; close others i.e. family, close friends and other people with whom they have strong emotional ties; paid employment as the means to finance the fulfillment of various needs; distant others for example-involvement in voluntary activities for the larger community (Clutterbuck, 2004).

A career is sequence of positions held by a person during the course of a lifetime. It comprises of series of work related activities that provide continuity, order and meaning to a person's life (Schein, 1996). This is an objective view of a person's career. There is also a subjective element in the concept of career. A career consists of the changes in values, attitudes and motivation that occur as persons grow older (Hall, 1976). A person's career is shaped by many complex factors, e.g., performance, education, experience, influential parents, caste links and a certain amount of luck (Sullivan, 1999). Career planning shapes the progression of individuals with an organization in accordance with assessments of organizational needs and the performance, potential and preferences of individual members of the enterprise (Armstrong, 2005). A career development system is a formal, organized, planned effort to achieve a balance between individual career needs and organizational workforce requirements (Leibowitz, Farren and Kaye, 1986; Farren and Kaye, 1984; Granrose and Portwood, 1987).

Diverse workforce (diversity) refers to the co-existence of people from various socio-cultural backgrounds within the company. Diversity includes cultural factors such as race, gender, age, colour, physical ability, ethnicity, etc. (Kundu, 2004). Dynamic companies look for people who are different from us because the diverse workforce may bring different talents, interests, and viewpoints (Simmons, 1996). The basic concept of managing diversity accepts that the workforce consists of a diverse population of people. It is founded on the premise that harnessing these differences will create productive environment in which everybody feels valued, where their talents are being fully utilized and in which organizational goals are met (Kandola and Fullerton, 1994). Ryder systems Inc, a logistics, supply chain, and transportation company, found that its diversity program resulted in fewer litigation costs (Noe, Hollenbeck, Gerhart and Patrick, 2007)

Attitude surveys are a valuable way of involving employees by seeking their views on matters that concern them. Attitude surveys can provide information on the preferences of employees, give warning on potential problem areas, diagnose the cause of particular problems, and compare levels of job satisfaction, commitment and morale in different parts of the organization (Armstrong, 2005). Attitude

surveys are developed by consulting firms, academicians, or others. They can also be custom-designed to address specific issues and concerns in an organization. But regardless of the type of surveys used, only surveys that are valid and reliable can measure attitudes accurately (Bracken, 2000).

A customer's decision to be loyal or to defect is the sum of many small encounters with a company and it is the company employees who control these small encounters (Horibe, 1999). Therefore it is necessary to achieve employee satisfaction to practice customer-centric strategic management. HR practices influence organizational performance and competitive advantage and those organizations which deploy good people management practices reap the benefits (Walker and Stopper, 2000). Even a highly successful company with a strong record of excellence in people management practices cannot achieve all-round success (Gratton, Hope-Hailey, Stiles, Truss, 1999) as changes take place slowly in the HRM area (Truss, 2001). To recruit and retain best talent, organizations not only need to be high performing but also seen to be of high character, credibility and integrity and value driven (Smith and Kelley, 1997). Organizations which adopt the 'people as partners in progress' policy demonstrate a distinct HR philosophy characterized by employment security, company flexibility, sharing of financial success with the workforce, development of good communication and consultation, and representative employee voice (IPA, 1997).

Performance results from fair-play. Fair process builds trust and commitment, trust and commitment produce voluntary co-operation, and voluntary co-operation drives performance, leading people to go beyond the call of duty by sharing their knowledge and applying their creativity (Kim and Mauborgne, 1999).

### **Objectives of the study**

The main objective of the study was to assess the human resource management practices being practiced in shipping companies. To achieve the main objective, the following sub-objectives were set:

1. To assess the practices regarding human resources in shipping companies.
2. To assess the development and performance appraisal of human resources in shipping companies.
3. To assess the compensation practices in shipping companies.
4. To identify the contemporary HR practices (like workforce diversity) being practiced in shipping companies.

### **Research methodology**

The present study is based on primary data gathered with the help of questionnaire comprising of three sections. The first section contained 10 background questions and second section contained 22 statements about the human resource management practices. The third section contained 45 statements related to employee service orientation. However, in this study we covered only second section i.e. related to human resource management practices (22 statements) along with first part i.e. related to general statements. The respondents were asked to rate statements on a five point rating scale where one indicated that respondents strongly disagree, two meant for disagree, three for neutral, four indicated agreeing and five meant strongly agree about what was described in the statement. These 22 statements can be seen through exhibit 1.

The questionnaire was administered to 600 respondents of 200 companies who have undergone training and development programs in training institutes in New Delhi, India. Only 250 (41.7%) of the returned questionnaires were found suitable for final analysis and without any discrepancies. Out of the sample of 250 respondents, 90 respondents were from Indian and 160 from multinational shipping companies. All respondent employees/ officials were of Indian origin.

**Exhibit 1: Description of Variables**

<b>Variables</b>	<b>Description</b>
V1	The organization conducts job analysis regularly
V2	The organization conducts human resource planning on a regular basis
V3	The organization gives special emphasis on service employees while doing HR planning
V4	The organization has a well defined recruitment policy
V5	The organization attracts service oriented employees towards organization
V6	The organization selects individuals on the basis of service attitude and competence
V7	The organization socializes its employees with service orientation
V8	The organization develops front-line employees for service delivery
V9	The organization has special training and development programs for service employees
V10	The organization provides service orientation to leaders from top management
V11	Performance appraisal is done regularly in the organization
V12	Service performance is given due weight in the performance appraisal of employee
V13	The organization has a system of pay for service performance. (pay for performance)
V14	The organization pays competitive salaries to the employees
V15	The benefits offered to employees are in line with other organizations
V16	All groups whether majority or minorities have equal say in the organization
V17	The organization has flexible work hours for special groups like women or physically challenged employees
V18	The organization has proper HR information system.
V19	The organization uses the human resource information system for effective service delivery
V20	The organization provides sufficient opportunities for career advancement of service employees
V21	The organization regularly conducts employee attitude surveys
V22	The organization tries to lead with development and adoption of new HR practices

The data gathered was analyzed with the help of statistical tools like actual counts, percentages, correlations, standard deviations, factor analysis, and mean and grand mean scores. Actual counts and percentages were used to assess the frequency and percentage extent of certain variables related to general and background information. Correlations were used to assess the relationship of human resource management practices practiced in shipping companies and standard deviations were calculated to understand the variations in data collected through responses. Factor analysis was basically used to reduce the data for further analysis. Mean and grand means were helpful in explaining the extent and direction of practice of HR practices and related factors.

Reliability of the data collected was also calculated by applying Cronbach Alpha. Cronbach's coefficient alpha is commonly used to measure reliability for a set of two or more construct indicators. Alpha value of the scale of 22 variables was calculated that was as high as 0.921. Factor wise alpha values were also calculated that were above required level i.e. between 0.866 and 0.625 (see Table 4). All of Cronbach's alpha values met the minimum criterion ( $\alpha > 0.60$ ) (Nunnally, 1978).

**Table 1: Characteristics of Sample**

Variables	Categories	Average	Number	%
1. Designation	Deck side officers		180	72.00
	Engine side officers		70	28.00
	<b>Total</b>		<b>250</b>	<b>100</b>
2. Gender	Male		250	100
	Female		0	0
	<b>Total</b>		<b>250</b>	<b>100</b>
3. Marital status	Married		114	45.6
	Unmarried		131	52.4
	No report		5	2
	<b>Total</b>		<b>250</b>	<b>100</b>
4. Age		29.666 (SD 8.867)		
5. Type of company	Indian		90	36.00
	MNC		148	59.20
	No report		12	4.80
	<b>Total</b>		<b>250</b>	<b>100</b>
6. Sector	Private		216	100
	Government		20	8.00
	No report		14	5.60
	<b>Total</b>		<b>250</b>	<b>100</b>
7. HRM Dept	Yes		210	84.0
	No		18	7.20
	No report		22	8.80
	<b>Total</b>		<b>250</b>	<b>100</b>
8. Work experience		8.296		
9. Work experience in this organization		4.259 (SD 3.867)		
10. Organizations changed	First joiner		136	54.40
	Up to two change		60	24.00
	More than two change		47	18.80
	No report		7	2.80
	<b>Total</b>		<b>250</b>	<b>100</b>
11. Employee union	Union exists		114	45.60
	Does not exist		136	54.40
	<b>Total</b>		<b>250</b>	<b>100</b>
12. Union membership	56.842	(SD 21.302)		

## Results and Discussion

Primary data based on 250 respondents from 125 shipping companies, those employing Indians as officials was analyzed to bring out HR practices being practiced by shipping companies. Table 1 explains the characteristics of the total sample. This sample included 90 officers from Indian Companies and 160 officers from multinational companies. Two types of officers were included in the survey i.e. deck side officers (72%) and engine side officers (28%). However all were males in the sample, out of which 45.6% were married. The officers surveyed were comparatively younger ( $\bar{x}$  = 29.666, SD = ± 8.867) The average experience of the officers/employees was 8.296 years and average experience in the shipping company when they were surveyed was 4.259 years. The first joiner officers were 54.40%; those who

have changed the company two times 24.00%; those who have changed more than two times 18.80%; and 2.80% did not report about the status of change. Further, majority of the officers (84.00%) reported that their shipping companies were having Human Resource Management Department. 45.60% officers/employees reported that union exists in the shipping companies and 56.842% (SD = ± 21.302) officers/employees were member of unions. The most significant case of transnational union bargaining co-ordination in existence is in the maritime shipping industry (Lillie, 2004). Although recent efforts at cross-border union collaboration have attracted attention, particularly in the European Union (EU) (Dolvik 1997; Gollbach and Schulten 2001; Ramsey 1997; Sisson and Marginson 2002), the only well developed example of union-driven transnational wage bargaining co-ordination covering large numbers of workers is in the maritime shipping Flag of Convenience sector. Maritime shipping is an interesting example because, unlike many other transnational bargaining initiatives, bargaining outcomes in maritime shipping have an immediate, direct and significant real-world impact in terms of worker welfare and labour costs. A global union association, the International Transport Workers' Federation (ITF), and a global employers' federation, the International Maritime Employers' Committee (IMEC), now negotiate over pay scales for seafarers on Flag of Convenience (FOC) ships. These negotiations set the pattern for pay and working conditions for a significant portion of the global seafaring work-force. The ITF brought about global wage bargaining by building and enforcing a global inter-union consensus between developed and developing countries around a uniform wage rate (Lillie, 2004).

Then the data regarding 22 HR statements was analyzed with the help of correlation and factor analysis. Table 2 showed the correlations of 22 variables those were almost significantly correlated. The factor analysis brought out 5 factors in all explaining 63.725% of total variance (see Table 3). The extracted communalities ranged from 0.493 to 0.782. For defining and clarity of the factor loadings more than 0.500 were considered. The names and descriptions of the factors are given as under.

The first factor named as 'job analysis and HR planning' loads significantly with HR practices like regular job analysis, regular HR planning, emphasis on service employees, use of human resource information system, conducting employee attitude surveys and lead with development and adoption of new HR practices. This factor indicates that shipping companies prepare job specifications and descriptions and further use in human resource planning for creating future workforce. This requires that the manager clearly understands the tasks required in every job. It is also the manager's responsibility to ensure that the work is being done safely, knowing where the potential hazards might manifest themselves and creating a climate where people feel free to interrupt the production process if dangerous conditions exist (Noe, Hollenbeck, Gerhart and Patrick, 2007).

Second factor i.e. 'training and performance appraisal of human resources' in shipping companies stress on training and development programs, regular performance appraisal, providing service orientation and giving due weight to service performance. This factor highlights the importance of training and development and performance appraisal of employees in shipping companies. Continuous training, empowerment, and teamwork facilitate employee development. Employees need continuous training in necessary technical and interactive skills. They need technical skills to do their jobs efficiently. To ensure courteous, caring, responsive, and empathetic service, continuous and extensive training in interactive skills is needed (Kundu and Vora, 2004). Many of the recent efforts of regulatory bodies in the maritime industry are being directed to ensure high quality in education and training worldwide, and being able to measure it.

Third factor is related to 'hiring and compensation system' in the shipping companies. The variables like well-defined recruitment policy, attracting service oriented employees/officers, selection on the basis of service attitude and competence, equal say of majority and minority employees, and paying competitive salaries and benefits to employees. This factor highlights the shipping companies' competitive



**Table 3: Factor Loadings of Varimax Rotated Principal Components**

Factors	Loadings	Eigen Value	% of Variance
<b>F1 Job analysis and HR planning</b>		8.636	39.256
Regular job analysis	0.521		
Regular human resource planning	0.810		
Emphasis on service employees in HR planning	0.713		
Use of human resource information system	0.570		
Conducting employee attitude surveys	0.538		
Lead with development and adoption of new HR practices	0.596		
<b>F2 Training and performance appraisal</b>		1.734	7.880
Training and development programs	0.622		
Providing service orientation to managers	0.669		
Regular performance appraisal	0.800		
Due weight to service performance	0.646		
<b>F3 Hiring and compensation</b>		1.456	6.616
Well defined recruitment policy	0.711		
Attracting service oriented employees	0.496		
Selection on the basis of service attitude and competence	0.631		
Paying competitive salaries	0.641		
Benefits to employees	0.536		
Equal say of majority or minority employees	0.501		
<b>F4 Facilitating workforce diversity</b>		1.157	5.261
Pay for performance (service)	0.501		
Equal say of majority or minority employees	0.627		
Flexible work hours	0.841		
Proper HR information system.	0.551		
<b>F5 Career development</b>		1.037	4.712
Socialization of employees	0.771		
Opportunities for career advancement	0.723		

hiring practices and compensation system. Since 1945, international competition has grown much more strongly among countries which were not traditional maritime nations, including newly industrializing nations but also micro-states with limited resources. In addition, developing nations have found that maritime employment can be a significant source of foreign exchange, driving the crews of convenience phenomenon. Low taxes and limited regulation have served to attract vessel owners to 'open' or 'flags of convenience' registries which usually specify no requirements regarding nationality and weak requirements regarding qualifications for their 'crews of convenience'. Crews increasingly come from countries other than those where vessel owners reside and other than those where the vessels are registered (Donn and Morris, 2001).

The top ten maritime labor supply nations in the late 1990s were Philippines, Indonesia, Turkey, China, Russia, India, Japan, Greece, Ukraine and Italy. None of the first six has a leading international fleet of its own. Rather, seafarers from these nations largely constitute crews of convenience on the vessels of other nations (Donn and Morris, 2001). Keeping in view the 'crews of convenience' and 'flags of convenience' and other such developments, the competitive hiring practices and compensation system are important for shipping companies to gain competitive advantage.

Fourth factor is related to contemporary HR practices being practiced in shipping companies named as 'workforce diversity and flexi-work system' covering variables like pay for performance, equality of

minority and majority groups of employees, flexi-work systems, and proper HR information system. From the manager's perspective, an HRIS can be used to support strategic decision making, to avoid litigation, to evaluate programs or policies, or to support daily operating concerns (Noe, Hollenbeck, Gerhart and Patrick, 2007). Dynamic companies look for people who are different from us. The organizations those fail to embrace cultural diversity effectively and do not take a holistic approach to eliminate discrimination and injustice will adversely affect both employees and customers. The key to create, develop, and retain diverse workforce is to find a way to make workforce to feel connected to their company (Kundu, 2004).

'Career development' is the fifth factor that emphasizes the socialization of employees with organizational culture and service orientation and providing opportunities for career development. One of the most pressing problems the shipping industry faces is a shortage of quality-educated officers and the factors affecting this are the career structures in the merchant marine, recruitment and wastage patterns, existence of training delays and the possible presence of feedback relationships between sea-going and shore-based maritime jobs. Traditionally, the career path in the merchant marine has been defined by a hierarchical structure, a rigorous departmental shipboard division, and a narrow-based education delivering professional skills not usable anywhere else but at sea or in the maritime related sector ashore. Consequently, for most seafarers coming ashore meant leaving maritime-related employment altogether (Obando-rojas, Gardner and Naim, 1999).

However, the technical, managerial and regulatory revolution that has affected the shipping industry during the last two decades has changed the role of those serving on board ships and the career path in the merchant marine. Today, shipboard operations require multidisciplinary and increasingly technical and interchangeable functional professional skills. Seafaring education is now being focused towards producing integral vessel managers (combining operational and managerial skills). Furthermore, there is an increasing trend to include an academic base for maritime shore based careers as part of the college-based education received by merchant marine officers. To this end, many maritime education and training establishments around the world are currently offering seafaring education programs combined either with a maritime-related degree, such as B.Sc. in Marine Technology, or awarding credits recognized by higher education institutions towards the completion of a professional degree. This maritime holistic education will necessarily improve the career prospects of officers within the industry ashore (Obando-rojas, Gardner and Naim, 1999).

One variable i.e. 'developing front line employees/officers for service delivery' did not load significantly on any factor. However, variable 'equal say of majority and minority employees' loaded significantly on two factors i.e. 'hiring and compensation' and 'workforce diversity and flexi-work system'.

**Table 4: Inter Factor Correlations, Means, SDs and Alpha values**

Factors	F1	F2	F3	F4	F5
F1	—				
F2	0.642**	—			
F3	0.597**	0.566**	—		
F4	0.632**	0.411**	0.625**	—	
F5	0.535**	0.413**	0.488**	0.435**	—
No. of Variables	6	4	6	4	2
Mean	3.573	4.024	3.868	3.294	3.744
SD	0.703	0.698	0.609	0.841	0.724
Alpha value	0.866	0.816	0.770	0.746	0.625

These factors were further subjected to correlation and were found highly correlated. 22 HR statements were also subjected to correlation and except few, all variables were correlated. Mean scores indicate that the strongest factor was the training and performance appraisal ( $\bar{x} = 4.024$ ). Hiring and compensation ( $\bar{x} = 3.868$ ) and career development ( $\bar{x} = 3.744$ ) were again strong HR dimensions in shipping companies. Job analysis and HR planning ( $\bar{x} = 3.537$ ) was found as moderate HR practice. Practices regarding workforce diversity and flexi-work system ( $\bar{x} = 3.294$ ) were also prevalent in shipping companies but comparatively not as strong as other HR dimensions.

### Limitations and future direction

Despite being different sources, different timing of data collection, and high alpha values of data, a potential limitation of this study was that the data was collected by using same construct (using self-completion questionnaires) with same method. The relationships among the variables and sub-scales could be influenced by common method variance. Podsakoff and Organ (1986) recommend that researchers should at least report results from a test of single-factor hypothesis as an explanation of inter-correlation of the variables. Harman's one-factor test on HR practices construct showed that the first factor accounted for only 39.256% of the covariance among measures (Podsakoff, MacKenzie, Lee, and Podsakoff, 2003; Podsakoff and Organ, 1986), suggesting that common method variance is not a severe issue.

Another limitation was that the data was collected from Indian bases, which could have been collected from the wider area. Rather it can be extended cross culturally that may give more generalized conclusions. Researches may be taken up to cover wider area and more respondents with cross cultural extensions. The data was analyzed by using only one independent variable. Further, researchers can increase independent variables to analyze the data more effectively.

Finally, the variables incorporated in the questionnaire were strictly related to HR practices and could not establish relationship of HR practices with the performance. Future researchers may take up studies on human resources with these aspects.

### Conclusion

This study was based on 250 observations from 125 shipping companies to bring out the human resource management practices in shipping companies. Factor analysis brought about five factors those were further analyzed. Two factors namely 'training and performance appraisal' and 'hiring and compensation system' emerged very strong practices followed by 'career development'. 'Job analysis and HR planning' was moderately practiced in shipping companies. 'Workforce diversity and flexi-work system' also showed presence but did not emerge as strong practice.

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