The relationship between development stages and the basic strategies emphasized are shown in Fig. VII-4-5.

Fig. VII-4-5. HNT Development Strategies by Phases 21st Century 2nd Phase 1996/97 - 1999/2000 1st Phase 1991/92 - 1995/96 Join the Internationally Excellent Companies Strengthening of HMT Management Foundations Major Issues Liberalization of Progress of the Indian Economy Internationalization Measures to - Production Cost - Intensification be Taken of R & D Efforts Reduction - Promotion of Inter-- Improvement of national Marketing Product Quality HMT's Basic - Modernization of - Modernization of Strategies Strategic Factories Other Factories - Strengthening of - Organizational International Restructuring - Promotion of QC Operations Activities - Improvement of R & D Capabilities

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#### C. Unit-base Strategies

#### 1. Machine Tools

#### (a) Growth Target

	1990/91	1996/97	1999/2000
Sales Turnover (Rs. million)	3,139	7,350	11,500
Production Share	33%	54%	55%
Annual Growth Rate	17%	15%	16%
	(85-90)	(90-96)	(96-99)

#### (b) Basic Strategy

The objective of the machine tool business is as follows:

To maintain HMT's position as the leader in the machine tools industry in India by supplying high-technology products and enhancing its market share.

In order to achieve the objective, the following strategies should be adopted:

- To increase the production share of CNC machines to 60% by 1999/2000 by steps, in accordance with the shift of market demand;
- To integrate and reduce the number of GPM models in line with the introduction of new CNC models;
- To strengthen the competitiveness both in price and quality through the modernization of production facilities and processes;

- To acquire high-level technologies, especially in such high-tech products as CNC machines, FMC or FMS through technical collaborations;
- To merge the present operations of Pragatools, which is currently one of the subsidiaries of HMT, into those of the machine tool business group of HMT.

# (c) Necessary Measures by Function

# i. Product Mix

- To rationalize (eliminate and integrate) the existing models and reinforce CNC models;
- To increase the CNC ratio to 40% in 1994/95 and to 60% in 1999/2000;
- To re-allocate products to units according to the product restructuring plan.

The following restructuring and re-allocation of products among units would be proposed for the long-term plan - a concept.

Unit	Production Items		Positioning
	CNC	GPM	of Unit
МТВ	Large machining centers, FMS, FMC, Ancillary Equipment	Radial drilling machine RM series Gear cutting, etc.	Center of technologies
MTP	Machining centers, CNC milling machines	Milling machine FN series, etc.	Specialize in MCs and CNC milling machines
MTK	CNC turning lathe	Turning lathe NH series	Specialize in CNC lathes
мтн	Large machining center, FTL, CNC Plano millers, Auxillary Equipment	SPMs, All types of horizontal boriang machines, etc.	Specialize in large machines and SPMs
МТА	CNC cylindrical grinder	Grinders (including tool and centreless)	Specialize in grinders
НМВ	Precision Machine Tools	Automate precision press, etc.	Specialize in precision machine tools

# ii. Marketing

- To make marketing activities more flexible to the market forces;
  - To capture as high a market share as possible for strategic products like CNC machines.

In order to achieve the above, the following should be carried out:

- To secure quicker and more firm deliveries;
- To make pricing more flexible;

- To give sales personnel more authority in negotiations;
- To reinforce the market monitoring system in order to identify customer needs and find potential customers;
   and
- To examine the use of authorized dealers in order to establish more economical sales activities.

#### iii. R & D

- To promote R&D in basic CNC systems technology;
- To promote the design development of CNC machine tools;
- To establish a central technology research institute for the study of CNC technologies;
- To utilize large-scale computers for the modernization of design and for the management of information on technologies.

# iv. Production

- To modernize production technologies;
- To renovate existing production facilities of the Machine Tool unit, Bangalore (MTB) as a strategic factory for modernization;
- To renovate all other factories based on MTB modernization experience by the target year of 1999/2000.
- To set up large-scale computers for production control.

#### y. Others

- To hold periodic general managers meetings' for interunit communication and information exchange, especially in technical areas.

# (d) Major Investment Plans

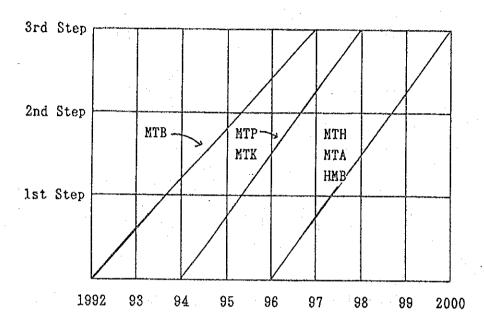
# i. Plant modernization

The following modernization plans should be implemented in phases and completed by the target year of 1999/2000.

Unit	Purpose	Content of Investment	Size of Investmen	Expected t* Effects
МТВ	Technological foundation for the System Construction	First step of investment plan -Facility for stand-alone CNC machines	100	-Cost reduction -Development of software
MTP	Manufacturing facility of MCs and milling machines	-Existing three GPSs -One new CNC machine Second step of	40	-Expansion of production -Cost reduction
МТК	Manufacturing facility of TCs and lathes	investment plan -Facility of FMC -Existing 8 - 12 GPMs -One FMC	65	-Expansion of production -Cost reduction
мтн	Manufacturing facility of large-size machines and SPMs	Third step of investment plan -Establishment of FMS -Existing 25 - 50 GPMs -One FMS	40	-Flexible use of facility -Cost reduction
МТА	Manufacturing facility of grinder		30	-Cost reduction
НМВ	Manufacturing facility of Precision Machin	ıes	15	Technology in Precision Machining

Investment size is shown as an index amount assuming that the size of investment in MTB is 100.

The tentatively proposed implementation schedule of the above plant modernization is roughly shown in the following figure:



ii. Establishment of the Central Technology Research Institute

# Location

Bangalore

# Purpose of Establishment

To integrate R&D activities into one location and promote R&D in CNC technologies with concerted effort.

# Major Activities

- To develop the basic design of CNC lathes and machining centers;
- To consolidate the ideas of FMC and FMS and develop the software for FMC and FMS;
- To develop auxiliary equipment for FA;

- To develop the software for FTL, the module machine of FTL, and head index machine;
- To prepare the development of CIM based on a largescale computer; and
- To actively collect overseas information on technolosies.

# iii. Establishment of Computer Center

# Location

Bangalore

# Purpose of Establishment

To gather the information from all units and enable them to use that information on a realtime basis.

# Steps of Establishment

- Step 1: Each unit will develop individually the production control system and the software for CAD/CAM.
- Step 2: A computer center with a large-capacity computer will be set up and the software for of FMS will be gathered here from all units.

# 2. Industrial Machinery

#### (a) Growth Targets

	1990/91	1996/97	1999/2000
Total Sales Turnover	423	3,690	8,070
(Rs. million)		•	
- Printing Mach.	127	590	1,230
- Dairy Mach.	35	110	250
- Die Cast./Plastic M.	85	380	670
- Press Mach.	175	600	1,100
- Other New Areas	0	2,010	4,820
Annual Growth Rate		43%	30%
	(85-90)	(90-96)	(96-99)

# (b) Basic Strategy

- 1. Because most of the units in the group are in the incubation stage in HMT, every effort should be made to explore their potential to the fullest extent and try to make each of them an autonomous major business group in HMT.
- 2. Each unit should be a core entity to achieve the future business diversification of HMT.
- 3. Each unit is required to examine the market trends constantly to try to flexibly adjust its product range accordingly.
- 4. Each unit should constitute a core group of HMT for strategic alliances with foreign manufacturers who have established technologies and marketing capabilities in the areas of HMT's business expansion.

#### (c) Major Actions to be Taken

#### i. Printing Machinery

- With the growing market demand, HMT should achieve the position of the leading printing machinery manufacturer in India by both expanding its production capacity and developing new products which would be needed in the market.
- To expand and modernize the existing production facilities as soon as possible in order to achieving the above.
- To introduce the world's advanced technology for both the modernization of production facilities and the new product development of 4-color offset printing machines.
- To establish its distribution network in India.
- Based on the close examination of the market demand in India, to diversify its product range into web offset printing machines or others, for which capital and technical tie-ups with the world's leading companies would become essential.
- To explore the export potential in international markets.

#### ii. Dairy Machinery

- Compared with its competitor, HMT has a narrow range of products. The existing product line should be widened.
- Product diversification into areas such as food processing or food packaging machinery should be aggressively promoted, for which capital and technical tieups with the world's leading manufacturers in each area would be recommended.
- In order to make the future direction of diversification clear, the unit should be renamed the Food Proc-

essing Machinery Unit.

- The direction of diversification would mainly be in the area of plant engineering of the food processing industry, in which HMT would have the advantage of being backed by its other engineering units.

# iii. Die Casting and Plastic Machinery

- Because the future expansion potential is limited in die casting machines, the operation of die casting machine manufacturing should be concentrated in the machine tool group.
- In plastic machinery, HMT needs further state-of-theart technology through capital or technical tie-ups with leading manufacturers of the world.
- In plastic machinery, HMT should develop new product lines such as extrusion machines, processing machines for pipes and films or blow molding machines, for which capital and technical tie-ups with foreign manufacturers should be obtained.

#### iv. Press Machinery

- The production facilities should be expanded and upgraded so that HMT could increase market competitiveness in the heavy plant engineering field.
- For the above, the product range of HMT should be further widened, and the design capability upgraded.
- In line with the above, technical tie-ups or Joint Working Arrangements (JWA) with leading manufacturers of the world should be entered into.

# (d) Major Investment Projects

Because many of the units have been required to diversify their product range or to explore new business opportunities, a large amount of new investments would be needed. However, at this stage, the contents of these investments cannot not be precisely defined.

Some of the investment projects which are presently linked to the existing lines of business are as follows:

- i. Expansion and modernization of the printing machinery factory
- ii. Expansion and modernization of the press machine factory
- iii. Modernization of the plastic machinery factory

#### 3. Watches

# (a) Growth Target

(Unit: 1,000 pcs.)

	1995/96	1999/2000
Annual Sale		
Mechanical Watches	5,900	5,500
(Hand Wound)	(4,400)	(4,000)
(Auto Wound)	(1,500)	(1,500)
Quartz Watches	8,500	12,000
(Analog)	(4,500)	(9,000)
(Digital)	(2,000)	(3,000)
[TOTAL]	[12,400]	[17,500]
HMT's Share	25%	25%

#### (b) Basic Strategies

- 1. To secure leadership in the field of quartz watches, which are considered to be the main products in the future, and to establish its status as a top watch manufacturer in India.
- To open up the era of full-scale export of industrial goods from India by cultivating the watch export market in the international scene.

Dividing the decade of the 1990's into two periods, the objectives in each period would be as follows:

Phase 1: Recovery of competitiveness and leadership in quartz watches and participation in the international market.

Phase 2: Reinforcement of HMT's status as a top watch manufacturer and enlargement of its status as a leading watch supplier to the international market.

Basic strategies in each period are as follows:

- Phase 1: Recovery of competitiveness and assumption leadership in quartz watches and participation into the international market.
  - (1) To enhance quartz watches production capacity
  - (2) To improve design and quality
  - (3) To reduce manufacturing costs by streamlining production facilities and improving productivity
  - (4) To reorganize the sales network for more effective performance
  - (5) To set up a 100% Export Oriented Unit (EOU) and open up an overseas sales network
- Phase 2: Reinforcement of HMT's status as a top watch manufacturer and enlargement of its status as a leading watch supplier to the international market
  - (1) To continue reinforcement and renewal of production facilities, including the 100% EOU.
  - (2) To strengthen market research ability including consumer trends.
  - (3) To build up more effective product development capabilities.
  - (4) To set up a overseas product distribution system including overseas product deposts.

# (c) Necessary Measures by Function

#### i. Product Mix

- Phase 1: To produce more fashionably designed quartz watches.
  - To reinforce the product range by getting into the fields of high-value watches and quartz digital watches.
- Phase 2: To widen the product range especially in high and medium class watches
  - To increase the products which meet the consumers' needs in the international market.

#### ii. Marketing

- Phase 1: To reorganize the domestic sales network in order to strengthen HMT's control over retailers.
  - To simplify the distribution channels for products, and spares parts.
  - To best allocate and distribute products by introducing POS.
  - To reinforce the direct approach to endusers by utilizing mass media.
  - To establish a more flexible pricing policy.
- Phase 2: To adopt a joint marketing policy, based on joint market research, with other consumer good, such as apparel, to anticipate and create consumer needs and new trends.
  - To reinforce the overseas sales channels by optimizing overseas product distribution.

#### iii. R&D

- To improve design capability.
- To develop designs which meet consumers' preference.
- To reduce the product development lead-time by introducing CAD.
- To improve package design.

#### iv. Production

- To establish a flexible manufacturing system suitable for keeping with up the changing market trends.
- To reduce manufacturing costs considerably by automation of production facilities, productivity improvement activities, etc.
- To improve quality control and also strictly control price negotiations with outside suppliers.
- To improve product surface finishing such as plating, surface grinding, etc., while establishing and implementing preventive methods to prevent surface scratches/cuts on final products.
  - To monitor the committed deliveries carefully.

#### 4. Tractors

# (a) Growth Targets

	1990/91	1996/97	1999/2000
Annual Sales	1,886	5,330	9,250
(Rs. million)		•	
Market Share	12.5%	16%	20%
Average Annual	15%	19%	20%
Growth of Sales	(1985-90)	(1990-96)	(1996-99

# (b) Basic Strategies

- 1. To recover and further expand its market share through the modernization and expansion of its production and marketing facilities.
- 2. To improve the quality of products through the development of fuel efficient engines, the improvement of operational functions and the increase of running speed.
- 3. To proceed with the development of new products, which would supplement the sales of tractors, such as engines or attachments.

The plan period up to 1999/2000 is divided into the following three phases.

Phase 1 (1991/92 to 1992/93) : Planning

Phase 2 (1993/94 to 1996/97) : Implementation Step 1

Phase 3 (1997/98 to 1999/2000) : Implementation Step 2

Action programs to be taken for each period are as follows:

- Phase 1: (1) To understand the present position of HMT and to have all employees be aware of it.
  - (2) To start with easier improvements such as 5-S activities.
  - (3) To review the existing corporate plan, and make necessary adjustments.
- Phase 2: (1) To expand the dealership network.
  - (2) To intiate R&D activities, aiming at international competitiveness.
  - (3) To modernize the factory.
  - (4) To begin exports.
  - (5) To seek an optimum product mix.
- Phase 3: (1) To achieve an international level of quality.
  - (2) To increase the export ratio of products.
  - (3) To introduce new, profitable products besides tractors.

# (c) Necessary Measures by Function

#### i. Product Mix

- To widen the assortment of tractors (Higher horse power tractors more than 60 HP and lower horse power tractors less than 25 HP to be made available).
- To increase the added-value of existing tractors with further features.
- To expand production of engines for applications other than tractors such as for generator, pump and industrial use.
- To develop potential products which would meet the needs of the international market.

#### ii. Marketing

- To establish a more intensive sales network by setting up new dealers.

- To strengthen the after-sales service function of the present dealers.
- To establish better communication among dealers, marketing staff and production staff.
- To expand marketing facilities including regional/area offices and dealership net-works.
- To adopt a more flexible policy on sales incentives to motivate company/dealers' sales force.
- To improve the quality of existing products first, before the development of new products.
- To develop tractors with faster speed and better fuel efficiency.
- To conduct R&D activities from an ergonomic point of view.
- To develop synchromesh gears, 4-wheel drive tractors and cabins.
- To introduce advanced foreign technology as necessary.

#### iii. Production

- To begin the improvement in productivity with 5-S activities.
- To expand the present production capacity.
- To introduce CAD/CAM systems.
- To modernize the assembly shop and machining shops focusing on conveyors and transfer lines.

# (d) Major Investment Plans

The following investment plans are envisaged.

- i. Objects of the investment:
  - To increase production capacity
  - To improve quality
  - To streamline production lines
  - To ease tool changes
  - To improve design flexibility by adopting FMS
  - ii. Shops necessary for modernization of facilities:
    - Foundry, Spindle-gear-small components machining, Heat treatment shop, Engine case machining, Press, Painting, Assembly and testing area renovations, Ancillary, and Material handling system.

#### 5. Lamps

#### (a) Growth Targets

1990/91	1996/97	1999/2000
237	996	1,220
3.6%	7.2%	9.2%
13%	27%	7%
(1985-90)	(1990-96)	(1996-99)
	237 3.6% 13%	237 996 3.6% 7.2% 13% 27%

#### (b) Basic Strategies

- 1. To rationalze the production processes with the aim to change the present business structure of this loss-making unit.
- 2. To change the present product mix putting higher emphasis on FTL, the market of which is expected to grow faster.
- 3. To tie up with a company which has both advanced technology and a strong brand name in the market with the aim for HMT to survive as one of the major suppliers of lamps in India.

#### (c) Necessary Measures

- Measures to rationalze production processes and increase profitability
  - To rationalize the production system of GLS either by integrating the present 6 assembly lines of GLS into 3 or a smaller number of lines, or by sub-contracting the assembly operations.
- To fully modernize the assembly line of FTL by introducing the most advanced technology through a tie-up with a world leading lamp manufacturer.

- To successfully introduct such new products as "Power Savers" or compact FTL into the domestic market.
- ii. Measures to increase the market share
  - To put emphasis on the production of FTL rather than GLS since the current product mix of HMT is heavily dependent on the latter while the higher market growth is expected in the former.
  - To introduce such new products as "Power Savers" or compact FTL into the market carefully after a thorough examination of product quality and market needs, avoiding the damage of lowering the company image in the market by a too hasty sales promotion.
  - To expand its sales network first into the western part, then the eastern part and last the northern part of India.
- iii. Measures for HMT to survive as one of the major lamp suppliers in India
  - To increase the domestic market share up to a level of nearly 10%.
  - To establish a strong tie-up with a manufacturer which has strong financial capability, advanced manufacturing technology and prominent brand names in the market, because the current capability of HMT is not sufficient for the achievement of the above market share both in capital and technology.

# (d) Major Investment Plans

- i. The rationalization and rehabilitation of current GLS production lines
- ii. The complete renovation of the FTL production line
- iii. The introduction of new production facilities to manufacture new products.

# 6. Foundry

#### (a) Growth Target

	1990/91	1996/97	1999/2000
Production (Ton/Month)	975	1,550	2,150
Annual Growth Rate	· -	8.0%	12.0%
	(85-90)	(90-96)	(96-99)
Outside Sales(Ton/Mont)	1) 0	150	450
Outside Sales Share	0	10%	20%

#### (b) Basic Strategy

The target of the casting business in HMT is as follows;

To change the organization of foundry plants each of which is currently a part of the machine tool unit, to an independent business unit, to increase the production capacity by modernizing both production facilities and processes, and to expand casting product sales to outside users including those in the overseas markets.

The plan period upto 1999/2000 is divided into the following two phases.

Phase 1: To consolidate the foundation of business in the domestic market

Phase 2: To exploit the potential in overseas warkets

Actions to be taken for these periods are as follows:

#### Phase 1:

To supply sufficient castings of required quality to HMT business groups

To start the production of medium-quality castings to outside users

#### Phase 2:

To open up overseas markets.
castings for overseas users as well as domestic
users.

#### (c) Necessary Measures

- To integrate all of the foundry plants into an independent business unit.
- To establish a marketing section in the above unit in order to start outside sales.

#### (d) Major Investment Plans

- i. Establishment of a model foundry plant at Bangalore
  - To establish a model plant which has advanced facilities and technologies in Bangalore.
- ii. The modernization and expansion of the foundry plant at Pinjore
  - The foundry plant at Pinjore which produces cylinder engine blocks for tractors with continuous processing technology should be expanded and modernized in order to meet the growing demand from the tractor factory.
- iii. The modernization of other foundry plants
  - Based on the technology accumulated in the model plant at Bangalore, other foundry plants of HMT should also be modernized.

#### 7. Bearings

# (a) Growth Targets

(Unit: 10,000pcs.)

		1996/97 (HMT Share)	
Ball Bearings	130	333	740
	(1.9%)	(2.5%)	(4.0%)
Tapered R. Bearings		175	90
	(6.9%)	(8.1%)	(9.1%)
Cylind. R. Bearings	27	65	100
	(22.5%)	(23.2%)	(25.0%)
Total	229	570	1,130
	(2.3%)	(3.7%)	(5.1%)

#### 2. Basic Strategies

Basic strategies proposed are as follows:

- 1. In order to compete in the very competitive markets, product competitiveness should be strongthened both in quality and price through rationalization of production processes.
- 2. Bacause competition in tapered roller bearings which have been the major source of profits in HMT would become harder, more emphasis should be put on securing the present OEM contracts and developing a replacement market.
- 3. To penetrate into the large and growing markets of small-size ball bearings, entering into a strong capital and technical tie-up with a world leading manufacturer, having advanced technology and prominent brand names, is essential.

# (c) Necessary Measures by Function

#### i. Product Mix

- To increase production for the OEM market by the establishment of more flexible manufacturing systems which could meet the demand for large varieties of small volumes of products.
- To produce more ball bearings to obtain higher market share under the capital and technical tie-up with a world leading company.

#### ii. Production

- To rationalize the existing facilities with the aim to strengthen the competitiveness both in quality and price.
- To establish a new mass-production plant which would produce small-size, general purpose ball bearings.

#### iii. Marketing

- To increase sales to the after (replacement) markets.

# (d) Major Investment Plans

- i. Investment in the rationalization of existing manufacturing facilities.
- ii. New plant establishment under the capital and technical tie-up with a world leading manufacturer.

# Appendix I. Members of JICA Study Team

Name	Specialty
Takashi NOBEHARA	Team Leader/Corporate Strategy
Yoichi MATSUI	Marketing Strategy
Hideo KATO	Organizational Restructuring
Tatsuro BANDO	Management Renovation
Yasushi FUKUDA	Productivity Improvement
Isamu OHARA	Productivity Improvement
Takeshi IMAI	Management Information System
Masahiko WATANABE	Corporate Finance
Kazuo MISHIMA	Economic/Financial Analysis
Koji CHIKARAISHI	Deputy Leader/Investment Plan
Toshio SHIINA	Machine Tool
Jingo ISOBE	Press
Shingo OWA	Tractor
Takao KITAYAMA	Casting and Forging
Sakuya YAGI	Casting and Forging
Akira INAGAKI	Printing Machinery

# Appendix II. Results of Diagnostic Study

# Notes on questionnaire of diagnostic study.

# 1. Definition of Department

Title	Function	Title	Function
Marketing	Marketing Marketing		Purchase
& Sales	Sales	Purchase	Material
	Service	& Store	Subcon.
	Regional Office		Store
	Corp. Planning	. 1	Inspection
Personnel	Personnel HRD	Production	Production
	Administration Secretary, Management Support	Project	Project
		Management	Unit GM
Finance	Finance Finance		V V 411

# 2. Definition of Unit

l	MTD	· —	Machine Tool Directrate	(Including	Marketing)
l	W D		Watch Directrate	( )	)

# 3. Definition of Location

# 4. Definition of Performance

```
PROFITABLE — WD , CSB , MTP , PRH , CNC , HMB , DCB , WFB ,

WFT , TRP , BLH

UN-PROFITABLE — MTD , R&D , MTB , MTH , MTK , PMK , MTA , WFR ,

DMU , LMH , HMT(1)

( excluding CHO )
```

# 5. Definition of Business

CHO — CHO , CSB

MT BG — MTD , R&D , MTB , MTP , MTH , MTK , MTA , PRH , PMK , CNC , HMB , DCB

W BG — WD , WFB , WFT , WFR

# 6. Definition of Answers

SÅ Strongly Agree Agree Not Sure NS  $\mathsf{D}\mathsf{A}$ Disagree SA Strongly Disagree Mean of scores evaluating the answers according to the MEAN following scale. SA - 2 points A- 1 point NS - 0 point DA--1 point SD --2 points

upper answer in a cell —— number of answers lower answer in a cell —— %

# 7. Method of Analysis

by Department

by PS Grade

by Unit

by Location

by Performance

by Business

HMT's products and process are not fully in tune with changing customer needs.

1300 mg 100 mg 1	T	T	<u> </u>					]	T
	S	s	A	N	. D	s	N	М	
	A M	_	^		_	_		E	· **
F2 & F3	Р	A		S	Α	D		A	<u>_</u> '
	L E						Α,	И	
TOTAL	253	15 5.9	130 51.4	5 2.0	97 38.3	6 2,4	-	0.2	
DEPTMARKETING & SALES	50	8,0	29 58.0	 	15 30.0	4.0		0.4	
PERSONNEL	24		58.3	1.2	9 37,5		<del>.</del>	0.2	
FINANCE	18	5.6		5.6	50.0	<b></b>		0	
ENGINEERING	60		30 50.0	1.7	40.0	1.7.		0.2	
PRODUCTION	46	6.5	39.1		52,2	2.2		-0.0	
PURCHASE & STORE	13		23.1	15.4	46,2	15.4		-0.5	
PROJECT	12	16.7	75.0		8,3		:	1.0	
MANAGEMENT	12	8.3	58.3		33,3			0.4	
OTHERS									) <u>,</u>
N A	18		72.2		27.8	<u></u>		0,4	1

We in different units should participate in joint development of products more often.

F2 & F3	S A M P L	S A	Α	N S	A	S D	N A	M E A N	
TOTAL	253	90 35.7			25 9.9	1,6	0.4	1.1	
DEPT MARKETING & SALES	50	20	25		5 10.0		<u>-</u>	12	ł
PERSONNEL	24	11 45.8	12 50.0		4,2			1.4	ļ
FINANCE	18	38.9	10 55.6	5.6				1.3(	
ENGINEERING	60	23 39.0	26 44.1	1	13,6	1 7.	1.7	1.1	
PRODUCTION	16	9 19.6	3 2 6 9 . 6	<u> </u>	6,5	$\frac{2}{4.3}$	   <del>-</del>	0.9	
PURCHASE & STORE	13	8 61.5	30.8		7.7		<u> </u>	1.5	
PROJECT	12	59.9	33.3		16.7		<del>-</del>	12	
MANAGEMENT	12	2 16,7	66.7	8.3	8.3			0.9	
OTHERS	-			   <u>-</u>			ļ <del>.</del>		
и А	18	22.2	44.4	5.6	22.2	5.6		0.6	

The initiative of new product development should be taken more strongly by the marketing division because they know the trends of customer needs.

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	S					_	N	м
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F2 & F3	P	A		S	Α	Ď		A
	E	:				i	Α	И
TOTAL	253	125 50.2		1.6	10 4.0	1 0.4	2 0.8	1.4
DEPTMARKETING & SALES	50	35 70.0	15 30.0					1.7
PERSONNEL	24	12 52.2	10 43.5		4.3		1.2	1.4
FINANCE	18	33.3	61.1	5.6			<del>.</del>	1.3
ENGINEERING	60				3 5.0			1.4
PRODUCTION	46	16 35 6	25 55.6		3 6.7	2 2 2 2	2.2	1.2
PURCHASE & STORÉ	13	45.2	38.5	7.7	7.7		<del>.</del> .	1.2
PROJECT	12	5 41 . 7 .	5 41.7		2 16,7			1.1.1
MANAGEMENT	12	50,0	5 41.7	8.3				1.4
OTHERS	_		_		-			
N A	18	8 44.4	9 50.0	5.6	-			1.4

The domestic competitor companies are more aggressive than HMT in product development, sales promotion or after sales service activities.

	s						N	М
	Λ M	S	<b>^</b>	N	D	S		Ε
F2 & ·F3	P	۸		s	Α	D		· A
	L E						Λ.	Ņ
TOTAL	253	41 16.2	110 43.5		80 31.6	7 2.8	_	0.4
DEPT MARKETING & SALES	50	7 14.0	23 46.0		14 28,0	4.0	<del>.</del>	0.4
PERSONNEL	2.1	10 41.7	29.2		7 29.2			0.8
FINANCE	18	5.6	72.2	5.6	16.7		<u> </u>	07
ENGINEERING	60	15.0	11.7	8.3	21 35.0	<u>-</u>		0.4
PRODUCTION	46	8.7	52.2	2.2	14 30,4	3 <u>6</u> . 5	   <del>-</del>	0.3
PURCHASE & STORE	13	30.8	7.7		61.5		<del>-</del>	0.1
PROJECT	12	16.7	33.3	25.0	16.7	8.3	<u>.</u>	0.3
MANAGEMENT	12	2 16.7	58.3		. 16.7	8.3	<del>-</del>	0.6
OTHERS			<u> </u>	_		]	<u> </u>	
N A	18	11 1	33.3	5 6	9 50,0			0.1

The lack of interpersonal and inter-departmental cooperation limits the effective management of HMT.

F2 & F3	S A M P L	S	Α	N S	D A	S D	И	M E A N	
TOTAL	253	41 15.3		5.2	57 22,6		0,4	0.6	
DEPT MARKETING & SALES	50	18.0	60.0	e 0	12.0	4.0		0.8	
PERSONNEL	24	9 39.1	21.7	1.3	34.8	<del>-</del> -	4.2	07	
FINANCE	18	<del>-</del> -	72.2	5.6			<b></b> . <del>.</del>	0.5	
ENGINEERING	60	18.3	31 51.7	1.7	25.7	1.7	<del>-</del>	0.6	
PRODUCTION	46	8.7	25 54.3	6.5	26.1	4.3	<del>.</del>	0.4	
PURCHASE & STORE	13	7.7	61.5	7.7	15.4	7.7		0.5	
PROJECT	12	25.0	33.3	8.3	33.3			0.5	
MANAGEMENT	12	16.7	50.0	16.7	8.3	8.3		0.6	
OTHERS	-		<u>-</u>				-		
N A	. 18	11.1	12 66.7		22.2			0.7	(; )

HMT is not very sensitive to market needs and does not take the customer's satisfaction into account in all its dealings.

					···	<u> </u>	v		
F2 & F3	S A M P L	S A	۸	N S	D A	S D	N	M E A	
	E						٨	N	
TOTAL	253	29 11.5			83 32.8	4 1.6		0.4	
DEPT MARKETING & SALES	50	13 26.0	22 44.0	4.0	1 2 24.0	2.0		0.7	
PERSONNEL	24	1 4, 2	70.8	1.4.?	20.8		<del>.</del>	0.6	. ~
FINANCE	18	1 5.6	,	1 5.6	38.9		<del>.</del>	0.2	
ENGINEERING	60	10.0		1.7	22 36.7	1.7		0.3	
PRODUCTION	46	8.7	11.3	8.7	41.3			0.2	
PURCHASE & STORE	13	7.7	30.8	7.7	46.2	7.7		-0.2	
PROJECT	12	8.3	75.0		16.7			0.8	
MANAGEMENT	12	8.3	66.7	:	16.7	8.3		0.5	
OTHERS	-					<u> </u>			
N A	18	1 5.6	14.4	5.0	44.4	_		0.1	ļ

HMT does not give me enough autonomy to do my job effectively.

F2 & F3	S M P L E	S A	۸	n s	D A	S	N A	M E A N
TOTAL	253	16 6.3	92 36.5	12 4.8	120 47.6	17 4.8		-0.1
DEPT MARKETING & SALES	50	12.2	24 49.0	4 1	16 32.7	2.0	2.0	0.4
PERSONNEL	24	8.3	37.5		12 50.0	4.2		-0.0
FINANCE	18			5.6		5.6		-1.0
ENGINEERING	60	5 8.3	33.3	5.0	·	3 5.0		-0.1
PRODUCTION	45	2.2	37.0	2.2	24 52,2	6.5		-0.2
PURCHASE & STORE	13		48.2		46.2	7.7		-0.2
PROJECT	12	8.3	50.0	ļ:	5 41.7		ļ <del>.</del>	0.3
MANAGEMENT	12	1 8.3	8.3	16.7	50.0	16.7		-0.5
OTHERS			 			ļ	ļ <del>.</del>	
N A	18		50.0	16.7	33.3			0.2

More responsibility for price negotiations with customers should be transferred to the marketing sections.

F2 & F3	S M P L E	S	A	n S	D A	S D	N A	M E A N
TOTAL	253	36 14.2		19 7.5	72 28.5	7 7.8	_	0.4
DEPT MARKETING & SALES	50	23 46.0	21 42.0	4.0	8.0			1.3
PERSONNEL	24	20.8	10 41.7	8.3	7 29.2			0.5
FINANCE	18		10 55.6		5 ] 3 . 3			0.2
ENGINEERING	60	5 8.3	31 51.7	δ 7	19 31.7	1 7		0.3
PRODUCTION	46	· · · · · · ·	18 39.1	6.5	22 47.8	3 6 . 5		-0.2
PURCHASE & STORE	13		53.8	23.1	3 23.1			0.3
PROJECT	12	8.3	83.3			8.3		0.8
MANAGEMENT	12	1 8.3	58.3	8.3	16.7	8.3		0.4
OTHERS	-						<del>-</del>	
N A	18	1 5,6	27.8	11,1	50.0	1 5.5		-0.2

The present distribution of production responsibilities & operations between units should be reviewed.

	s						N	М	
·	A M	S	A	N <sub>.</sub>	D	\$		E	ľ
F2 & F3	P	Α		S	A	D		A	
	L E						Α	N	
TOTAL	253	19 7.6		29 11.6	24 9.6	-	1.2	0.8	
DEPT MARKETING & SALES	50	5 12.0	35 70.0	6 12.0	6.0			0.9	
PERSONNEL	24	16.7	18 75.0		8,3			1.0	
FINANCE	18	1 5.6	13 72.2	2 11,1	2	<u> </u>		0.7	
ENGINEERING	60	3.3	36 60.0	10 16.7	20.0		   <del>-</del>	0.5	
PRODUCTION	46	2.2	38 84.4	8.9	4.4	<del>.</del>	2.2	0.8	
PURCHASE & STORE	13		10 76.9	2 15.4	7.7.			0.7	
PROJECT	12	8.3	83.3	8.3				1.0	
MANAGEMENT	12	10.0	70.0	<u> </u>			16.7	0.9	1
OTHERS	_			<del>.</del>	 			ļ <u>-</u>	T
N A	18	16.7	61.1	11.1	11.1	<u> </u>		0.8	

Some activities in my job should be reinforced as they are not being given the importance they merit.

F2 & F3	S A M P L E	S	Λ	n S	D A	S D	N A	M E A N	
TOTAL	253	26 10.4	157 62.5	14 5,6	53 21.1	0.4	0.8	0.6	,
DEPT MARKETING & SALES	50	18.0	30 60.0	2 4.0	9 18,0			0.8	
PERSONNEL	24	4,2	70.8		25,0			0.5	Y
FINANCE	18	11.1	61.I	5 6	22.2			0.6	
ENGINEERING	60	15.0	38 63.3	3.3	18.3		<u>-</u>	0.8	
PRODUCTION	16	1.3	30 65.2	8.7	21.7			0.5	
PURCHASE & STORE	13	7.7	69.2	7.7	15,4			0.7	
PROJECT	12		72.7		27.3		8.3	0.5	
MANAGEMENT	12	9, J	27.3	9.1	45.5	9.1	8 . 3	-0.2	
OTHERS	-				. :		 		
N A	18	5.6	61.1	3 16.7	16.7			0.6	

In the marketing of products much faster decisions are needed, in particular for price negotiations.

	S						N	м
·	A M	S	A	И	D	s		E
F2 & F3	P	Α		S	A	D		A
	L					,		
	Е						Α	И
TOTAL	253	54 21.3	158 62.5	20 7.9		2 0.8		1.0
DEPTMARKETING & SALES	50	19 38.0	29 58.0	<del>.</del>	4.0			1.3
PERSONNEL	24	7 29.2	16 66,7		1 4.2	   <del>-</del> -		1.2
FINANCE	18	11.1	61.1	3 16.7	2	-	_	0.7
ENGINEERING	50	8	40 66.7	6 [0.0	10.0		_	0.8
PRODUCTION	46	9	25 54.3	6	8.7	2 4.3		0.8
PURCHASE & STORE	13	23.J	53.8	3	[ <del>.</del> .			1.0
PROJECT	12	3 25.0	58.3	1 8.3	$\frac{1}{8,3}$			1.0
MANAGEMENT	1 2		10 83.3	-	2 16.7		_	0.7
OTHERS	-					<u> </u>		-
N A	18	3 16.7	13 72.2		1 5.6	_	_	1.0

Resource allocation between units is not optimum.

	s						N	М	Ţ
	A M	S	A	N	D :	S		E	
F1 & F11 & F12 & F13	P	^		S	Λ	D		А	A PARTIE A
	L E					l 	Α.	N	8. 1
TOTAL	253	31 12.4	119 47.6				3 1.2	0.5	
UNIT H O	10	10.0	40.0	30.0	10.0	10.0	 	0.3	
M T D	22	9.1	12 54.5	18.2	9.1	9 1		0.5	
w D	1.5	5.7	8 53.3	13.3	26,7	-	4	0.4	
CSB.	4		2	25.0		-	_	0.3	
R & D	6	66.7	-	33.3		-	-	1.3	
мтв	40	3 7.7	53.8	23.1	1 0	_	ا 2.5		
мтр	10	22.2	5	11.1	1	_	10.0		
мтн	23	8.7	10	30.4	3	1	-	0.4	
РКН	3	_	1	1	1 33.3			0	
мтк	22	1 4.5	12	5 22.7	4	_	_	0.5	
РМК	2	100.0			Y	_		2.0	
мта	9	1 1			11	_		0.8	
СИС	8		4 57.1	1	2 28.6		1 12.5		
	5	2 40.0	7		1 20.9	_	14.4		
н м в	4	3	3					1.0	
D C B	19	25.0 3	9.0		5	 	- · · · · · · · · · · ·	11.3	
W F B	10	15.8	4/.4	10.5	20.3			0.5	
W F T	5	1	2	20.0				0	'
W F R	7	20.0	10.0	40.0		{·····		0.8	
T R P		2			.100.0			-1.0	
D M U		100.0			4	1		2.0	
	8	<u>-</u>	1	1	50.0	12.5		-0.5	
В L Н	3	33.3	33.3	33.3				1.0	

The information on international market trend, on new products or on the movements of rival companies is not sufficient in HMT.

	s						N	м
	A	s	Α	N	, D	s		E
	M P	Λ		s	Α	D	·	. "
F1 & F11 & F12 & F13	L				·			Α
	E						A	N
TOTAL	253	38 15.0	117 46.2	21 8.3	73 28.9	1.6		0.4
UNITC. H O	10	30.0	60.0		10.0	<del>.</del> .		11
мтр	22	9.1	40.9		27.3	4.5		0.2
w D	15	26.7	46.7	6.7	20.0			0.8
СЅВ	4		75.0		25 0			0.5
R & D	6		16.7					1.0
M T B	40	5 12,5	42.5	7.5	14 35.0	2.5		0.3
M T P	10		60.0		30.0			0.3
мтн	23	3 13.9	15 65.2	<u>-</u>	21.3			0.7
P R H	3	33.3	66.7	ļ <u>-</u>	 			1.3
мтк	22		68.2	9.1	18.2	4.5	<del>.</del>	0.4
Р. М. К	2	- +	50.0			ļ	<del>.</del>	1.5
,M ,T, A	9	33.3	33.3	55.5	11.			0.9
C N C	8	25.0	37.5		37.5			0.5
нмв	5	20.0	40.0	20.0	20.0	<u>-</u> -		0.6
рсв	4	_	75.0	<u>.</u>	25,0		ļ	0.5
W F B	19	21.1	31.6	10.5	36.8	ļ <u>-</u>		0.4
W F T	10			10.0				.0.
W F R	5	-	40.0		10.0	20.0	). , <del>.</del>	-0.4
T R P	7	<del>-</del>	57.1	<del>.</del>	42.9		.   <del>.</del>	0.1
D M U	2	. 50,0	50.0				.	15
L M H	8		62.5	12.5	25.0			0.4
він	3		$\begin{array}{c c} & 1 \\ & 33 & 3 \end{array}$	66.7	<u> </u>	<u></u>		- 0.3

Corporate Head Office should become more efficient than present.

+			·	-				
	S						N	м
	A M	S	A	N	D	S		E
F1 & F11 & F12 & F13	P	A		S	A	D		A
	E	r					A	N
	<del></del>	59	154	20	- 16			N
TOTAL	253	23.6	61.6	8.0	6.4	0.4	$\begin{array}{c} 3 \\ 1.2 \end{array}$	1.0
UNIT · · · · · · · · · · · C H O	10	50.0	20.0	10.0	20.0	_		1.0
M T D	22	3 13.6	68 2	3 13.6	1 4.5			0.9
W D	15	11 73.3	2	1 6.7	_	1 6.7		1.5
C S B	4	1 25.0	3					
	6	2					<del>-</del>	1.3
R & D		33.3		<del>-</del> -5				1.3
мтв	40	13 34.2	52.6	13.2			5.0	1.2
мтр	10	50.0	50.0					1.5
мтн	23	4.3	19 82.6	=	3 13.0		-	0.8
ркн	3	33.3	66.7	_	_	-	_	1.3
мтк	22		181	4 18.2	_	_	_	0.
P M K	2	50.0	1 50.0					
		1 1	7		· · · · · · · · · · · · · · · · · · ·			1.5
M_T_A	9	11-1	77.8		11.1		1	0.9
C N C	8	28.6	71.4				12.5	1.3
н м в	5	20.0	80.0	<del>-</del>				1.2
D С в	4		75.0		25.0		_	0.5
w f B	19	21.1	11 57.9	2 10.5	10.5	_	_	0.9
w F T	10	30.0	5 50.0	1	10.0			
		1	4	14.4	17.7	•••••	• • • • • • • •	1.0
W F R	5	-11	80.0 6			<del>-</del>		1.2
тр		14.3	85.7		<del>-</del> -			1.1
D M U	2	50.0			50.0			0.5
L M H	8		5 62.5	12.5	25.0 1	-		0.4
B L H	3		65.7	;	33.3	1		<u> </u>

A positive attitude toward new areas of business does not exist in HMT.

F2 & F3	S A M	S A	۸	N S	D A	S D	N	M E
r 2 & r 3	L E						A	A N
TOTAL	253	36 14.2			84 33,2	1.6	_	0.4
DEPTMARKETING & SALES	50	22.0	18 36.0	2 4.0	17 34.0	2 4.0	-	0.4
PERSONNEL	24	3 12.5	14 58.3	4.2	5 20.8	1 4.2	-	0.5
FINANCE	18	1 5 6	9 50.0	2 <u>1</u> 1 . 1	33.3		_	0.3
ENGINEERING	60	10 16.7	25 41.7	3.3	23 38.3	_	-	0.4
PRODUCTION	16	8.7	·19 41.3	8.7	19 41.3		_	0.2
PURCHASE & STORE	13	7.7	46.2	7.7	5 38.5	-	_	0.2
PROJECT	12	2 16.7	41.7	25.0	2 16.7		-	0.6
MANAGEMENT	12	. 3 25.0	50.0	8.3	1 8.3	1 8 3	-	0.8
OTHERS	-				-		_	-
N A	18	1 5.6	11 61.1		33.3	~	-	0.4

In such areas as computer system development or R&D, more centralized planning and coordinating of functions covering all HMT units are expected.

	s						N	м
	A M	S A	۸	N S	D A	S D		E
F2 & F3	P L				A			, <b>A</b> , ,
	E			·			Λ	N
TOTAL	253	32 12,7	181 72.1	11 4.4	2 2 8 . 8	5 2,0	2 0.8	0.8
DEPT MARKETING & SALES	50	14.0	38 76.0	4.0	3 5.0	·		1.0
PERSONNEL	24	2 8.3	16 66.7	4.2	4; 16.7	1 4.2		0.6
FINANCE	18	.5 27.8	66.7		1 5,6	• • • • • • • • • • • • • • • • • • •	<del>-</del>	12
ENGINEERING	60	11,7	43 71.7	<del>-</del>	11.7	3 5.0	<del>.</del>	0.7
PRODUCTION	46	6.5	37 80 4	10.9	2.2		<del>-</del>	0.9
PURCHASE & STORE	13	23.1	46.2	15.4	2 15.4	<del>.</del> .		0.8
PROJECT	12	16.7	66.7		2 16.7			0.8
MANAGEMENT	12		80.0		10.0	10.0	16.7	0.5
OTHERS	_			-				
N A	18	16.7	13 72,2		l 5.6		_	1.0

The present organization structure of HMT consisting of Business Groups, Units and Divisions is to be reviewed.

		T	Γ	7	T	1		1
	S	s	A	N	D	s	И	М
	м	A	^	S	ļ			Ε
F1 & F11 & F12 & F13	q			5	A	D		A
	L						A	N
mon 4 t	253	30	134			4	1	
TOTAL		11.9	4	1	3	1.5	0.4	0.5
UNITC H O	10	20.0	40.0	10.0	30.0	<del>-</del>		0.5
M T D	22	27.3	45.5		27.3			0.7
w	15	6.7	40.0 40.0	6.7	26.7	20.0		-0.1
C. S. B	4		100.0					1.0
R & D	6		83.3					1.2
м т в	40	15.0	20 50.0	17.5	6 15.0	1 2.5		0.6
мтр	10		8 80.0	_	20.0 20.0			0.6
мтн	23	17.4	11 47.8	13.0	5 21.7	-	-	0.6
РЯН	3	_	2 85.7		1 33.3	_	-	0.3
м т к	22	-	12 54.5		. 8 36,4	_	_	0.
Р м к	2	-]	100.0		_	-	-	1.0
мтл	9	11.1	5 55.6		33.3	-		0.4
C N C	8	14.3			2 28.6		12.5	0.6
н м в	5		100.0		_	_		1.0
D C B	4		2 50.0		50.0			0
W F B		2	8	21.1	5	_		0.4
WFT		10.0	7		20.0			•
W F R	5	19,9,	70.0 2 40.0		31			0.7
	7		2	i l	60.0 4		····· <del>·</del>	-0.2
TRP	2		1	14.3	1 !			-0.3
D. M. U			50.0	<del>-</del>	50.0 1		· <del>-</del>	
L M H	8		87.5	<del>-</del>	12.5		· <b>· · · · · ·</b>	08
B L H	3	66,7	1		33.3			

The decision making process of top management has to be faster than it currently is.

				·				
	S	S	· A	N			N	м
·	м	A	^	S	D A	S		E
F1 & F11 & F12 & F13	P L	Λ		3	А	D		Α
·	E		,				Á	И
TOTAL	253	40 15.8	194 76.7	3 1,2	15 5.9	1 0.4	_	_1.0
UNITC H O	10	10.0			10.0			1.2
M T D	2 2	18,2	68.2		13.6			0.9
а w	15	46.7	53.3		-			1.5
С. 5. В	4		100.0				-	1.0
R & D	6	66.7	33.3					1.7
МТВ	40	5 12,5	85.0	· · · · · · · · ·	1 2.5		-	1.1
М. Т. Р.	10		100.0		<del>.</del> .			1.0
мтн	23	2 8.7	16 69.6	4.3	17.4			0.7
РКН	3		100.0					1.0
мтк	2 2		19 86.4		3 13.6		-	0.7
РМК	2		100.0	<u>-</u>			<del>-</del>	1.0
м т А	9	.11.1	77.8		11.1		_	0.9
C N C	8	12.5	87.5		-		-	1.1
н м в	.5		2 40.0	20.0				1.2
рсв	4		75.0	25.0		_	-	0.8
WFB	19	26.3	13 68.4		1 5.3	_	-	1.2
w F T	10	20.0	70.0		_	10.0	-	0,9
W F R	5	20,0				-	-	1.2
TRP	7	_]	100.0	-	-	- · · · · · · · · · · · · · · · · · · ·	-	1.0
рми	2	<u>-</u> ]	100.0	-	_	-	_	1.0
L M H	8	_	37.5		12.5	-	_	0,8
a: BLH	3		3 100.0	_				1.0

### 3. Answers Concerning Hierarchy

The delay of decision making in HMT sometimes creates problems in business operation.

F2 & F3	S A M P L E	S A	A	N S	D A	S D	N	M E A	
TOTAL	253	67 26,6	166 65,9		13 5,2	-	0.4	1.1	
PS GRADE D G M (PS VII)	177	5 2 29 . 5	111 63.1	5 2.8	8 4.5	-	1 0.6	1.2	
J G M (PS WI)	51	9 17.6	37 72.5	2.0	7.8	_		1.0	
G M (PS K)	14	28.6	9 64.3	_	7.	-	-	1.1	ĺ
OTHERS	8	12,5	87.5	<del>.</del>	<del>.</del> .	- · · · · · ·		1.1	
N A	3	33.3	66.7	_	_	_	_	1.3	

Decisions made are not usually implemented immediately in HMT.

F2 & F3		S A M P L	S	A	N S	D A	S	N	M E A
TOTAL		253	29 11.5	154 50.9			-		0.6
PS GRADE · · D G M	(PS VI)	177	22 12.4	104 58.8	4.0	44 24.9	_	-	0,6
J G M	(PS We)	51	4 7.8	35 68.6		9 17 6	-		0.7
G M	(PS 区)	14	2 14.3	8 57.1		28 6	-	-	0.6
OTHERS	S	8		5 62.5		37.5			0.3
N A		3	33.3	2 66.7			_	_	1,3

There is a big difference between responsibility and authority in my position i.e. too little authority with too much responsibility in my position.

	S A	S	А	N	D	S	N	М
F2 & F3	M P	Λ.		s	Α	D		E A
	E						A	N
TOTAL	253	34 13.4	100 39.5		104	. 5 2 . 4	-	0.2
PS GRADE · D G M (PS VI)	177	24 13,6	75 42.4	3 1.7	70 39,5	5 2.8	-	0.2
J G M (PS W)	51	9 . 17,6	17 33.3	5 9.8	19	1		0.3
С M (PS K)	14	7.1	42.9	<del>.</del>	50.0		-	0.1
OTHERS	8		25.0	1 12.5	5 62.5	•		-0.4
N A	3		-	•	3 100.0			-1.0

#### 3. Answers Concerning Hierarchy

Adequate authority should be delegated to middle management which is not so at present.

F2 & F3	S A M P L	S	A	7. S	D A	S D	N A	M E A N
TOTAL	253	37 14.6	140 55,3	9 3.6	65 25,7	0.8	_	0.6
PS GRADE D G M (PS VI)	177	23 13,0	1.07 60.5	5 2,8	42 23.7	_	_	0.6
J G M (PS WI)	51	13 25.5	20 39. 7	4 7.8	13 25.5	1 2.0	-	0.6
G M (PS K)	14	7.1	42.9		6 42.9	7.1		0
OTHERS	8		5 82.5		3 37.5			0.3
N A	3		66.7	-	33,3		-	0.3

Decision making should be more centralized.

F2 & F3	S A M P L	S A	A	n s	D A	S D	N A	M E A N
TOTAL	253	1 0.4	35 13.8		177	33 13.0	-	-0.8
PS GRADE · D G M (PS VII)	177	0. E	25 14.1	2 1.1	125 70.6			-0.8
JGM (PS WD)	51		7 13.7	4 7.8	35 68.6		-	-0.7
G M (PS K)	14		7. l		10 71.4	3 21.4		-1.1
OTHERS	8		25.0	l 2.5	50.0	1 12.5	-	-0.3
N A	3				100.0			-1.0

In our units there are too many managerial or supervisory staff members.

-	2 & F3				S A M P L E	S A	Λ	N S	D A	S	N	M E A N
1	OTAL				253	27 10.7	155 61.5		59 23.4	3 1.2	0.4	0.6
	PS GRADE D G M	(PS	YII)		177	18 10.2	116 65.5	5 2.8	38 21.5	_	_	0.6
	J G W	(PS	VIII)		51	9 17.6	28 54.9		10 19.6	2 . 0		0.7
	G м	(PS	IX)		14	• • • • • •	8 57.1	<del>.</del>	28,6	2 11.3		0
	OTHER	s		· · · ·	8				75.0		<del>.</del> <del>.</del>	-0.5
1	N A				3	_	50.0	). <u> </u>	50.0	-	33.3	0

#### 3. Answers Concerning Hierarchy

There are certain jobs (tasks) in my role which could be abolished or at least simplified.

F2 & F3	S A M P L	S A	A	n s	D A	S D	N A	M E A	
TOTAL	253	11 4.4	126 50.2	16	97 38.6	0.4	0.8	0.2	
PS GRADE D G M (PS VI)	177	8 4.5	90 51.4	l1 δ.3	66 37.7		2	0.2	
JGM (PS W)	51	3 5,9	25 49.0	1 7.8	19 37,3		-	0.2	
G M (PS K)	14	<u>.</u> .	8 57 1	7.1	28.6	7.1		0.1	
OTHERS	8		12.5	-	87.5	-	_	-0.8	
N A	3		2 66.7	-	33,3	- 1	-	0,3	

Some tasks I perform could be logically transferred to another department.

	s						И	М
	A M	- S	A	N	D	S		E
F2 & F3	P	A		S	A	D		A
	E						A	N
TOTAL	253	8 3.2	103 41.0	5 2.0	128 51.0		0.8	-0,1
PS GRADE · · D G M (PS VI)	177	3.4	73 41.5	3	91 51.7	3 1.7	0.6	
J G M (PS W)	51	3.9	20 39,2	2.0	24 47.1	4 7.8		-0.2
G M (PS Д)	14		38.5	7.7	53.8		7.1	-0.2
OTHERS	8		37.5	<del>.</del>	5 62.5		<u>-</u>	-0.3
N A	3	_	66.7	_	_33,3		_ [	0.3

Decision making has to be faster at all levels than it currently is.

F2 & F3	S A M P L	S A	A	ч	D A	S D	N A	M E A N
TOTAL	253	48 19.0	196 77.5		7 2.8	-	-	1.1
PS GRADE · D G M (PS VI)	177	36 20.3	133 75.1	2	6 3.4		<del>.</del>	
J G M (PS W)	,51,	8 15.7	42 82.4		2.0			1.1
G M (PS K)	14	2 14.3	8.57	<del>.</del> .			<del>.</del>	1
OTHERS	8	25.0	75.0			<del></del>	 	1.3
N A	3	_	100.0		-			1.0

# 4. Answers Concerning Planning

The most suitable planning process is in operation in HMT.

F1 & F11 & F12 & F13	S A M P L	S A	A	n s	, D	s D	И	M E A N
BUSINESS·····CHO·CSB	14		7,1	28.6	8 57,1	1 7.1	-	-0.6
MT · BG	154	1.3	40 26.1	24 LS.7	81 52.9	6 3.9	0.6	-0.3
W·BG	49	<del>-</del>	12 24.5	12.2	29 59.2	2 4 l	-	-0.4
AGRI BG	g		11.1	11.1	δ 66.7	111.1	-	-0.8
LMH	8		3 37.5	25.0	25.0	1 12.5		-0.1
ВГН	3		-	33.3	66.7			-0.7
HMT (1)	16		δ.3	31.3	10 62.5			-0.6

Long term strategic thinking is a way of planning in HMT.

	<del></del>			·				
	S .	s	Α -	N	D	s	N	М
F2 & F3	М Р	А		s	A	D		E
	L E						A	A N
			100				41	,,
TOTAL	253	1.2	103 41.0		108 43.0	1 2 4 . 8	0.8	0.1
PS GRADE · · D G M (PS VE)	177	2 ],]	73 41.2			10 5.6	_	-0.1
J G M (PS Wi)	51	2.0	21 42.9	5 10.2	42.9	2.0	2 3.9	0
G M (PS K)	14		50.0	<del>-</del>	6 12,9	. 1 7. J		-0.1
OTHERS	8		25.0	25.0	50,0			-0.3
N A	3				100.0	_		1.0

The targets set in the corporate plan are much too diversified, and concentration of efforts in certain areas is difficult.

F2 & F3	S A M P L	S A	A	n s	D A	S	N	M E A
TOTAL  PS GRADE · D G M (PS VI)	253	3	82	19.8	58	2 0,8	A 1 0,4	0.2
J G M (PS W)  G M (PS X)	51	1.7 1 2.0	7	28.0	5	0.6 -	1 2.0	0.2
OTHERS	8	1 12.5	50.0 5 62.5 3	25.0	35.7	7.1.		0.9

### 1. Answers Concerning New Recruitment and Job Assignment

Since HMT is more than 30 years old, some units now have very old employees, i.e. average age is high. Some balance of young and old should have been maintained.

,   ` .		S						N	м	T
		A	s	A	N	D ·	·s		É	1
F1 & F11 & F	12 & F13	M P	Α		s	Α	D		Α.	N.A.
1 4 111 4 1		L E						A	и]	
		a_	69	173		9		ļ	**:	ļ.
TOTAL		253	27.5	68.9		3.6	-	0.8	1.2	-
UNIT	· · с н о	.10	30.0		<del>.</del> .	10.0			1.1.1.1.1	ļ
	M T D	22	40.9	13 59.1	<del>.</del>			   <del>-</del>	1.4	}
	W D	15	26.7	53.3		20.0			0.9	
	C S B	4	50.0	50.0					1.5	
	R & D	6	33,3	50.0		1 16.7	_	-	1.0	
	мтв	40	15 37.5	24 60.0		1 2.5	-	-	1.3	
	мтр	1.0	1 10.0	9			-	-	1.1	
	мтн	23		13 56.5			_		1.4	Ī
		3	3***	3 100.0					1.0	
	P R H	22	2 9,5	19				1 4.5	1.1	N-2
	M T K		2	90.5				a		}
	<u>P_M_K</u>	1 1	190.0	R i		1			2.0	
	M T A	9	1	88.9		11.1			0.8	ļ. ]
	C N C	8	12.5	87.5 5					1.1	-
	н м в	5		100.0	<b>.</b>	<del>.</del> .			1.0	
	D C B	4	25.0						1.3	
	W F B	19	42.1	11 57.9					1.4	
	WFT	10	10.0	90.0					1.1	
	WFŔ	5.	20.0	80.0					1.2	
	T R P	7		6 85.7 2		l 14.3			0.7	]
	ט א מ	2		100.0	-		_	_	1.0	
	L M H	8	1 12,5	7		_	-		1.1	
		3	.2	1 1		<del></del>			1.7	
	B L H		00./	1 33.3		L				L -

# 1. Answers Concerning New Recruitment and Job Assignment

Guidelines for manpower allocation among the departments should be clearly established and updated more often.

	r							
	S	S		,	<u>,                                    </u>		И	М
	м		A	N S	D	S		E
F1 & F11 & F12 & F13	P L	A		8	Λ	D		Α
	E					'	Λ	N
TOTAL	253	46 18.4	194 77,6	3	7 2.8		3	1.1
UNITC H O	10	30.0	7 70.0	_		_	<u>.</u>	1.3
мтр	22	18,2		4.5	-			let.
W D	15	1 2	73.3		13.3		-	0.9
C S B	4		100.0	l :	<u> </u>			1.0
R & D	6		66.7			<del>.</del>		1.3
мтв	40	12 30.8	26 66.7	2.6		- -	2.5	1.3
мтр	- 10		100.0		-		<u></u>	1.0
мтн	23	34.8	12 52.2		2 8.7			1.1
PRH	3		3 100.0					1.0
M T K	22	1 7	18 85.7		<del>.</del> .		4.5	
Р М К	2		100.0					1.0
M T A	9		8 88.9		11.3		<u></u>	0.8
C N C	8	12.5	87.5	<del>-</del>	<del>.</del> .			 
н м в	5		100.0		<del>.</del> .			1.0
рсв	4	50.0	50.0		<del>.</del> .	<del></del> .		15
W F B	19	21,1	73.7	   <del>-</del> -	5.3		_	
w F T	10	<del>.</del> .	100.0	ļ <del>.</del>		<del>.</del>	<u> </u>	1.0
w F R	5		100.0					1.0
TRP	7		100.0	ļ <del>.</del>			ļ <b>.</b> :	1.0
ט א ס	2		100.0				ļ <u>.</u>	10
L M H	8	2 25.0	75.0				ļ <del></del>	1.3
він	3		2 66,7	<u> </u>			<u> </u>	1.3

The criteria for decision making should be clear and understood throughout the company which is not so now.

***************************************	S						N	М
	Ā	\$	A	N	D	s	.,	E
F2 & F3	M P	٨	. *	s	A	D		A (
	L E			-			Α	N
TOTAL	253	39 15.5	168 66,7	14 5.6			0.4	0.8
PS GRADE D G M (PS VII)	177	27 15.3	124 70.5	. 7 4.0	18 10.2		0.6	0.9
JGM (PS Va)	51	8 15.7	33 64.7		5 9.8	<del>.</del> .		0.9
G M (PS K)	14	2 14.3	35.7	7.1	5 35.7	1 7.1	-	0.1
OTHERS	8	12.5	50.0	1 12.5	2 25,0		_	0.5
А И	3	33,3	66.7					1,3

The present training programs for top and middle managers in HMT are not sufficient and should be expanded.

F2 & F3	S A M P L E	S A	Α	n s	D A	S D	N A	M E A N
TOTAL	253	55 22.0	170 68.0	4 1.6	20 8.0		3 1.2	1.0
PS GRADE · D G M (PS VII)	177	35 20.0	121 69.1	3 1.7	15 8.6	0.6	1 . 1	1.0
JGM (PSW)	51	16 32.0	30 60.0	1 2.0	3 6.0		1 2 0	1.2
G. м (PS X)	14	2 14.3	11 78.6	_	7.1		-	1.0
OTHERS	8	12.5	75.0	_	1 12.5			0.9
N A	3	33.3	66.7	_				1.3

New training facilities to offer specific training courses for specialists should be established.

	s	_				_	N	м
	A M	s	A	И	D	s		E
F2 & F3	P	Λ		S	Λ	D		A
	L E						A	N ·
TOTAL	253	53 .21,1	186 74.1	1.6	8 3.2	_	2 0.8	1,1
DEPTMARKETING & SALES	50	12 24,0	36 72.0	2 4.0				1.2
PERSONNEL	24	3 12.5	18 75.0	4.2	8.3			0.9
FINANCE	18	2 11.8	12 70.6	1 5.9	2 11.8	<u> </u>	1 5.6	0.8
ENGINEERING	60	14 23.3	45 75.0	-	1.7	<u> </u>		1.2
PRODUCTION	46	11 23.9	34 73.9	-	2.2		-	1.2
PURCHASE & STORE	13	2 15.4	11 84.6	-	-	-		1.2
PROJECT	1 2	2 18,2	9 81.8	-	-	-	1 8.3	1.2
MANAGEMENT	12	3 25,0	9		_			1,3
OTHERS								_
N A	18	22.2	12 66.7		11.1		_	1.0

The present skill training programs for general workers are insufficient and need to be expanded.

	s	:	T	1			N	м	T
	) Å	s	٨	N	D	s		E	
	M	A		s	À	D		l	
F1 & F11 & F12 & F13	L							A	-
	E						A	N	1
TOTAL	253	33 13.1	71.7	13 5,2	24 9.6	0.4	0.8	0.9	1
UNIT······C H O	10	30.0			1 10,0	10.0		0.8	
МТD	22	4 18.2	72.7	4.5	4.5		<del></del>	1.0	
W D	15	13.3	80.0	6.7				l.i.l.	
C S B	4		100.0					1.0	
R & D	б	1 16.7	66.7	16.7				1.0	
мтв	40	7 17.5	29 72.5	2 5.0	2 5.0			1.0	
мтр	10	10.0	l g					1.1	
мтн	23	4 17.4	17 73.9	1 4.3	1 4.3			1.0	
PRH	3	-	66.7	-	33.3			0.3	
M T K	22	1 4.8	13	9.5	23.8	~	1 4.5	0.5	
Р М К	2	-	1 50.0		50.0		<del>-</del>	0	
M T A	9	1 11.1	7		1 11.1	_		0.9	
C N C	8	1 12.5	7		-			الما	
н м в	5	-	4 80.0		20.0	-		0.6	
рсв	4		100.0		-	-	_	1.0	
W F B	19	3 15.8	13		3 15.8		-	0.8	
W F T	10	-	80.0		20.0	-	_	0.6	
WFR	5	1 20.0	1 3		1 20.0		_	0.8	ľ
T R P	7		4 57 1		3 42.9	-		0.1	ľ
рми	2	_	1 50.0		1 50 0			0	[
	8	1 12,5	6	1					
L M H	3		100.0		_			1.0/	J
B L H	لـــــــــــــــــــــــــــــــــــــ	<u>_</u>	LAVOV	L	L	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	ί,

Most of the workers in our unit are not willing to be trained as multi-skilled workers.

	s	_					N	м
	A M	S	٨	N	D	S	•	E
F1 & F11 & F12 & F13	P	A		S	A	D.	1	A
	L E		!				A	N
TOTAL	253	21 8,3				1.6		0.1
UNIT·····c H O	10	-	6 60.0		40.0	-		0.2
м т р	22	3 13.6	31.8	4.5	50.0	_		0.1
w D	15	5.7.	40.0	6.7	6 40.0	1 6.7		0
C.S.B	4	 	<del>-</del> -	25.0	3 75.0	- • - • • <del>-</del> -		-0.8
R & D	6	16.7		16.7	1 15,7	<del>-</del>		0.7
M T B	40	15.0	50.0	15.0	20.0	• • • • • • • • • • • • • • • • • • •		0.6
M T P	10		10.0		90.0			-0.8
м т н	23			4.3	39 J 3			0.2
PRH	3	33,3	66.7		ا ا			1.3
м т к	22	9.1	40.9	13.6	36.4			0.2
Р М К	2	50.0	50.0					1.5
M T A	9	11.	55.6		22.2		:	0.6
C N C	8		12.5	12.5	50.0	25.0		-0.9
н м в	5		40.0	20,0	40.0		<b>-</b> <del>-</del>	. 0
D C B	4	· · · · ·	50.0		50.0			<u> </u>
w F B	19	5,3	21.1	15.8	57.9			-0.3
W F T	10	20.0	50.0	10.0	20.0			0.7
W F R	5	40.0	40.0		20.0			1.0
TRP	7		42.9		57.1			-0.1
р м и	2		50.0	<u> </u>	50.0			0
L M H	8		25.0	12.5	50.0	12.5		-0.5
B L H	3		86.7		33.3			0.3

Rewards/Promotions/Responsibilities must be determined by the individual's capability and achievements, not by his age or education.

F2 & F3	S A M P L	S A	A	N S	A D	S D	N	M E A
TOTAL	253	117 46,6	122	3 1,2	8 3,2	0.4	0,8	1.4
PS GRADE D G M (PS WI)	177	77 43.5	91 51.4	2 1.1	7 4.0	_	-	1.3
JGM(PSW)	51	27 55.1	20 40.8	2.0	1 2.0	_	2 3.9	1.5
G M (PS K)	14	50.0	6 42.9	<u>.</u> .		7.1.	<u> </u>	1.3
OTHERS	8	5 62.5	37.5	<u> </u>	- -		<u>-</u>	1.6
N A	3	33,3	66.7	-			<u> </u>	1.3

HMT's employees do not have a sufficiently challenging spirit to accomplish goals and provide new ideas.

	S						N	М	
·	A M	S	Α	N	D	S		E	İ
F2 & F3	P P	А		S	A ·	D		A	ĺ
	L E						A	N	
TOTAL	253	12 4.7	94 37.2	11 4.3	104 41.1	32 12.6		-0.2	
DEPTMARKETING & SALES	50	1 2,0	21 42.0	2.0	1.7 34.0	10 20.0	<del>.</del>	-0.3	٠.
PERSONNEL	24	3 12.5	10 41.7	8.3	33.3	1 4.2		0.3	
FINANCE	18	1 5.6	33.3	1 5.6	50.0	1 5.6		-0.2	
ENGINEERING	60	δ.7	2 2 3 6 . 7	5.0	40.0	11.7	- · - · · ·	-0.1	ļ
PRODUCTION	46	2.2	15 32.6	4.3	50,0	5 10.9		-0.3	
PURCHASE & STORE	13	7.7	23.1	7.7	38,5	23.1	<del>.</del>	0.5	
PROJECT	12		16.7	8.3	66.7	8.3		-0(	4
MANAGEMENT	12		8 66.7		16.7	16.7	<del>.</del>	0.2	
OTHERS	_		 	<u> </u>		ļ <u>.</u>			
и л	18	5,6	38,9		44,4	11.1		-0,2	

A risk taking approach toward new unexplored areas exists in HMT.

A STATE OF THE STA									
	-	S A	s	A	N	g	S	И	М
	•	м	A	•	s	A	D		E
F1 & F11 & F12 & F13		I.					_		A
		E						. А	N
TOTAL		253	5 2.0	84 33.2	24 9.5	118 46.6	2 2 8 . 7	•	-0,3
UNIT······C H O		10	10.0	40.0		20.0	30.0	<del>-</del>	-0.2
M T D	· 	2 2	4.5	40.9	4.5	40.9	9.1	<u>-</u>	-0.1
W D		15	6.7	20.0		53.3	20.0	<del>-</del>	-0.6
C S B	 	4			25.0				0.8
R & D		6		1 16.7		50.0	33.3		-1.0
м т в		40	_	42.5	12.5	16 40.0	5.0		-0.1
мтр		10		30.0		79.0			-0.4
мтн		23	1 4,3	30.4	1 2	12 52.2	4.3		-0.2
PRH		3			33.3	65.7.			-0.7
M T K		22		40.9	1 4.5	54.5		<del>-</del>	-0.1
РМК		2				100.0			-1.0
м т а		g		22.2		56.7	<u> </u>	   <del>-</del>	-0.7
сис		8		37.5	12.5	37.5.	12.5		-0.3
н м в		5		40.0		40.0	20.0	<del></del>	-0.4
D C B	<del>.</del>	4			25.0	50.0	25.0		-1.0
W F B		19		21.1	26.3	47.4	5.3	<del>-</del>	-0.4
W F T		10	10.0	40.0		50.0		:	0.i
₩ F R		5		20.0		50.0	20.0		-0.8
T R P		7		28.6	<del>-</del>	4 57 . 1	14.3		-0.6
D M U		2		50.0		50.0	   <del>-</del> -	<del>-</del>	0
L M H		8		37,5	25.0	25.0	1 12.5		-0.1
B L H		3	_	33.3		66.7	<u> </u>		-0.3

New ideas and approaches are not necessarily respected highly in HMT.

	S						N	. М
	М	S	Λ	N	D	S		E
F2 & F3	Р	Α		,s	A	מ		A
	E						A	и (
FOTAL	253	13 5.1	110 43.5		104 41.1	3 1.2	-	0.1
DEPT MARKETING & SALES	50	6 12.0	22 44.0	4 8 0	16 32.0	2 4.0	<u> </u>	0.3
PERSONNEL	24		14 58.3	<del>.</del>	9 37.5	1 4.2	<del>.</del>	0. t
FINANCE	1.8		44.4	1 5.5	50.0	-	<del>-</del>	-0.1
ENGINEERING	60	3 5.0	27 45.0	10 16.7	20 33,3	- -		0.2
PRODUCTION	4.5		16 34.8	4 8.7	26 56.5	-		-0.2
PURCHASE & STORE	13	1 7 7	38.5	_	53.8		<u>.</u>	0
PROJECT	12	8.3	33.3	2 16.7	41.7		<u>-</u>	0.1
MANAGEMENT	12		33.3	16.7	50.0			-0.2
OTHERS							,	
N A	18	11.1	10 55.6		33.3	_		0.4

#### A more open appraisal system is required.

	S						N	М
	A M	S	A	N	D	S		E
F2 & F3	P	Α		S	A	ם		A
	E						A	N
TOTAL	253	19 7.5	142 56.3	11 4.4	79 31.3	1 0.4	0.4	0.4
DEPT MARKETING & SALES	50	10.0	3 2 64.0		9 18.0		<del>.</del>	0.7
PERSONNEL	24	4.2	15 62.5	4.2	29.2		<del>.</del>	0.4
FINANCE	18	1 5.6		5 <u>.</u> 6		 		0.4
ENGINEERING	60	5 8 3	23 38.3	3,3	30 50.0			0.1
PRODUCTION	46	3 6.7	31 68.9	4.4	17.8	2.2	2.2	٥
PURCHASE & STORE	13	7.7	8 61.5	7.7	23.1	<u> </u>		0.5
PROJECT	12	2 16.7	7 58.3		25.0			0.7
MANAGEMENT	12	8.3	50,0	]	5 41.7		-	0.3
OTHERS					ļ			
N A	18	_	50.0		50.0			0

The appraisal system must be consented to by all employees.

	s		٠				N	м
	A M	S	A	N	D	S		E
F2 & F3	P	A		S	A	D		A
	E						Α	N
TOTAL	253	7 2.8	150 59.5		81 32,1	0.4	0.4	0.3
PS GRADE · D G M (PS VI)	177	2.3	107 60.8		55 31.3		1 0 5	
JGM (PS WE)	51	2 3.9	27 52.9	3 5.9	18 35.3	2.0		0.2
G M (PS K)	14		10 71.4		4 28.5		-	0.4
OTHERS	8	12.5	50.0	-	3 37.5	_	_	0.4
. и А	3		2 66.7		33.3		-	0.3

The present appraisal system does not exactly reflect each employee's achievements or efforts.

	s	2					N	М
	A M	S	A	N S	D	S		E
F2 & F3	P L	Λ		3	Α	D		- <u>A</u>
	E						A	N
TOTAL	253	2 2 8 . 7	119 47.2		103 40.9		0.4	0.2
PS GRADE D G M (PS W)	177	15 8.5	82 4Б.б		73 41.5	-	0.6	:
JGM (PS W)	51	7 13.7	25 49.0		18 35,3			0.4
G M (PS K)	14		8 57.1		42,9		<u>-</u>	0.1
OTHERS	8		25.0		6 75.0		-	-0.5
N A	3	-	66.7	33,3	-	-	_	0.7

# 4. Answers Concerning Wage, Salary, Bonus

I am not satisfied with the returns I get from  ${\tt HMT}$  as a company in terms of income level.

				-	*****				
	S A			N			N	м	
	М	S	A	N S	D A	S D		E	
F2 & F3	P L	^			^			A	
	E	<u> </u>	<u></u>				Α	N (	• )
TOTAL	253	26 10.3	104 41.3			13 5.2	0.4	0.1	
PS GRADE · D G M (PS W)	177	16 9.1	81 46.0	4.5	34.1	11 6.3	0.6	0.2	
JGM (PS W)	51	8 15.7	16 31.4	9.8	39.2	3.9		0.2	
G M (PS K)	14	?.J.	28.6	:	64.3		<del></del>	-0.2	
OTHERS		12.5	37.5	:	50.0		<b>:</b>	0.1	
N A	3				100.0			-1.0	1
									_
TOTAL	253	26 10.3		13 5.2	96 38.1	13 5.2	0.4	0.1	
ииттс н о	10	2 20.0	20.0		40.0	20.0	<u>.</u>	-0.2	
мтр	22	1 4.5	9 40.9	9. <u>i</u>	36.4	9.1		-0.0	
w D	1,5	26.7	26.7		40.0	5.7	<del>.</del>	0.3	
C S B	4	25.0	25.0	<del>-</del>	50.0			0.	1
R & D	6	1 16.7	33.3	<del>-</del>	3 50.0			0.2	[
мтв	40	1 2,6	18 46.2	10.3	16 41.0		2.5	0.1	
мтр	10	30.0	50.0	. <b>.</b>	20 0		<del>-</del>	0.9	
мтн	23		14 60.9	<del>.</del>	7 30.4	8.7		0.1	
ркн	3		66.7			33.3		0	
мтк	22	1 4.5	36.4		13 59.1			-0.1	
P. M. K	2		100.0		-			1.0	
мтл	9	111	66.7		22.2			0.7	
C N C	8	25,0	50.0		1 17.5	12.5		0.6	
н м в	5	20,0	60.0	<b></b>		20.0	<del>.</del>	0.6	
D C B	4			<del>-</del>		25.0	<del>.</del>	-1.3	
W F B	19	5,3	31.6	<del>-</del>	10 52.6	10.5		-0.3	
W F T	10	20.0	40.0		40.0		. <b></b>	0.4	<i>]</i>
W. F. R	\$	20.0	20.0	20.0	40.0			0.2	
T. R. P.	7	14.3	57.1		2 8 S			0.6	
D M U	2			50.0	50.0			-0.5	
L M H	8	12.5	12.5	25.0	50.0			-0.1	
B L H	3	33.3	33,3		33.3		_	0.7	Ĺ

# 4. Answers Concerning Wage, Salary, Bonus

The present worker-incentive system based on standard hours should be reviewed.

F2 & F3	S A M P L E	S A	A	n s	D A	s p	N A	M E A N
TOTAL	253	5 2 2 0 . 6		12 4.8	16 6,3	_	1 0.4	1.0
DEPT MARKETING & SALES	50	8.0	80.0	6.0 8.0	6.0			0.9
PERSONNEL	24	25.0			2 8.3			1
FINANCE	18		66.7	1 5.6	1 5,6			
ENGINEERING	60	11 18.3	73.3		3 5.0	, . <u>-</u>		1.0
PRODUCTION	46	15 32.6	63.0		4.3	<u>-</u>		1.2
PURCHASE & STORE	13	23.1	69.2	-	17.7.		   <del>-</del>	<u>ll</u>
PROJECT	12		63.6	36.4	-		8.3	0.6
MANAGEMENT	12	25.0	56.7		8.3			1,1
OTHERS								
N A	18	33.3	7 38,9	11.1	16.7			0.9

Clearer incentive systems to managerial and clerical staff members should be established.

	s						И	· <b>M</b>
	A M	s	A	N	D	S		E
72 & F3	P	A		S	A	Q		Α .
	L . E						A	N
TOTAL	253	42 16.7	190 75.7	3 1.2	15 6.0	1 0,4	2 0.8	1.0
DEPT MARKETING & SALES	50	9 18.4	38 77.6	2.0	2.0		2.0	1.1
PERSONNEL	24	16.7.	70.8		8.3	4.2		0.9
FINANCE	18	5 27.8	72.2	<del>.</del>	_			1.3
ENGINEERING	€0	13.3	46 76.7		10.0			0.9
PRODUCTION	16	6 13,0	35 76.1	2.2	8.7			0.9
PURCHASE & STORE	13	30,8	8 61.5		7.7			1.2
PROJECT	12		10 90.9	9.1		-	8.3	0.9
MANAGEMENT	12	2 16,7	10 83.3					1.2
OTHERS	-	-	-	<u>-</u>	_	_		<del>.</del> .
АИ	18	22.2	13 72.2		1 5.6	_		1.1
S GRADE · D G M (PS VI)	177	79 16.5	133 75.6	0.6	13 7.4		1 0.6	1.0
JGM (PS WI)	51	10 20 0	36 72.0	1 2.0	2 4.0	2 . 0	1 2.0	1.0
G M (PS K)	14	2 14.3	12 85.7			<u> </u>		1.1

### 4. Answers Concerning Wage, Salary, Bonus

Most of the workers would work harder if their productivity improvements were more directly linked with their income incentives.

	s		,				N	М
	A M	S	Α.	N	D	S		E
F2 & F3	P	A		S	Λ	D		A
	E			-		·	Α,	N
TOTAL	253	60 23.8	162 64.3	11 4.4	18	0.4	1 0.4	1.0
DEPT MARKETING & SALES	50	22.0	34 68.0	6.0	4.0			1.1
PERSONNEL	24	5 29.8	15 62.5	1 4 2	12.5	- i <del>.</del> .		0.9
FINANCE	18	33.3	55.6	11.1		<del>. "</del> -		1.2
ENGINEERING	60		68.3	1.7	11.7			0.9
PRODUCTION	46	13 28.3	28 60.9	4.3	5.5		<del>.</del>	1.1
PURCHASE & STORE	13	6 45,2	6 46.2		7.7	<del></del> .		1.3
PROJECT	1 2	9.1	72.7	3 j 1	9.1	<del>.</del> .	8.3	0.8
MANAGEMENT	12	25.0	75.0			   <del>-</del>	<del>-</del>	1.3
OTHERS				_ <b></b> -				[
N A	18	22.2	61.1	1 5.6	1 5.6	1 5.6		0.9

The present retirement benefits (gratuity, pension, PF, etc.) in HMT are better than those at other companies.

	s						И	М
	Α [	S	Λ	N	D	S	Į į	E
	М	Α		s	A:	D		
F2 & F3	P							A
	E	,					A	N
			21	5.0	160	16		
TOTAL	253	0.8	8.4	20.1	64.3	6.4	1.6	-0:7
	177	0.6	15 8.6				2	-0.7
PS GRADE · D G M (PS VI)		و د لا د		1 10		2	2	
JGM (PS WI)	51	2.0	8.2			1.1	3.9	-0.6
G M (PS IX)	14		 	28.6	9 64.3	7. l	<u> </u>	-0.8

In order to provide for the life-time welfare of employees, supportive measures for retired employees such as WETAX' should be introduced.

F2 & F3		S A M P L	S A	A	и s	D A	S D	N A	M ( E A N
TOTAL		 253	43 17.3	176 70.7	21 8.4	8 3,2	0.4	4 1.6	1.0
PS GRADE ·· D G M	(PS VII)	177	33 19.0	120 69.0			_	3	,1.0
J G M		5 1	14.0	37 74.0	4 8.0	1 2.0	2.0	2.0	1.0
	(PS IX)	14	7.1	1 2 85.7	7.1				1.0

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# 5. Answers Concerning Promotion

A	G E	Ξ								٠	·
			S A	B E L	B E L	B E L	B E I.	B E L O	5 5	N	м
F2 & F3			M P	o W	o w	Ŏ. W	L O W	o w	A N D O		E
			L E	3 5	4 0	5	5 0	5 5	E R	A	N
TOTAL	:		253	0.4	15 6.0						47.8
PS GRADE · · D G	M (PS	<u>(1)</u>	177	ļ <del>.</del>	11 6.2	27.		7 46 2 26.0		 	47.0
J G	M (PS)	AN)	51	ļ <del>.</del>		1.1.1.	25.	21	21.6	<u> </u>	50.5
<u>                                     </u>	M (PS	x)	14	-	l <i>-</i>	J	28.	1 4 5 28,6	42.9		53.1
<del>,</del>	YEA		IN	PF	RES	EΝ	T (	GR_A	DE		
S A	B E E E E E E E E E E E E E E E E E E E	B E L	B L O W	B E L O	B E L	BELO	B	B E L	9	И	М
M P	L I	Ö	NO W	o w	o w	O W	ELOW	o w	A N D C	)	E
L	1 2	. 3	4	5	6	7	8	9	E		A
1	32	55 4	9 75	ļ	14	ļ	3	1 1		A	N
253	26	1.9 19. 41 3.	5 29.9 5 55	7,2	5.6	1	2 0.		1.		
D G M 177 J G M 51	4	3.3 .19.	5 14	6.3	3.4				0.6	0.6	2.3
J G M 51 G M 14	1	2	3 5	9.8	]	5.9			20		3.5
		21.	35.7	L:	17.1	l	: 7!	·	71	.]	3.4
YEARS	OF S	ERV	7IC:	E	IN	H	MT	:			
	S	B E L O	B E L	B E L	B E L O	B E L	B E L O	B E L	3 5 A	N	м
	M P	₩	ů W	o W	o W	O W	ŵ	ŏ w	N D O V		E
	L E	5	0	1 5	2	2 5	3 0	3 5	V E R	A	A
	2.5	3 3.6	6 2.4	15 6.0	49 19.6	67 26.8	77	25 10.0	2	-3	
DGM (PS VII)	17	21	2.3	4.5	46 26.1	5 2 29.5	50	13	0.8	0.6	21.9
JGM (PS Wi)		1 2.0	2.0	7.8	3 5.9	12 23.5	21	17.6			24.1

# 5. Answers Concerning Promotion

I would like to work with HMT till i retire.

	s			ar marine abanda de la companio della companio de la companio della companio dell			N	М	
	A	S	A	N	D	S		E	
F2 & F3	M P	Α		s	Α	D		Α	
1,5 or 1,0	L E						A	N	J,
TOTAL	253	51 20.3	118 47.0		22 8.8	3 1.2	0.8	0.8	
PS GRADE · D G M (PS VI)	177	32 18.3				3 1.7	2 l.l	0.7	
JGM (PS M)	5]	11 21.6	20 39.2	16 31.4	7.8	ļ <del>.</del>	<u> </u>	0.7	
G M (PS K)	14	35.7	5 35.7	28.6	l:	]	ļ <del>-</del>	1.1	

In HMT, acceptance of leadership is based on the individual's knowledge and skills and not on age or in position in the hierarchy.

F2 & F3	S A M P L	S A	A	N S	D A	S D	N A	M E A N
TOTAL	253	5 2 0	140 55,3	21 8.3	8 2 3 2 . 4	2.0		0.2
PS GRADE · D G M (PS VI)	177	4 2.3	93 52.5	16 9.0			<del>.</del>	0.2
JGM (PS WI)	51	1 2 0	31 60.8	3 5.9	16 31.4		<del>-</del>	0.3
G M (PS IX)	14		9 64.3	7.1	28.5	<del>.</del>	l <del>.</del>	0.4

The criteria for promotion should be improved so as to be made more objective.

		S	s	Α	N	D	S	N	М
•	1	М	A		S	A.	D		E
F2 & F3		P L							Α .
		E		-	~~~			· A	N
TOTAL		253	36 14.3	196 78,1	3 1,2	16 δ,4	-	0.8	1.5
S GRADE · · D G	M (PS VI)	177	28 16,0	135 77.1	0.6	11 5.3		2 1 . l	1.0
J G	M (PS Wa)	5 l	6 11.8	4 2 8 2 . 4	1 2.0	2 3.9		-	1.0
G	M (PS X)	14	2 14.3	9 64.3	7.1	2 14.3	-		0.8

### 6. Answers Concerning Rotation, Transfer, CDP

A system of more frequent job rotations and shifts should be introduced.

	S		~~~		***********		N	м
	A M	S	Ą	N	D	S		E
F2 & F3	P	۸		S	Α .	D		A
	E						A	И
TOTAL	253	31 12.4	135 <b>5</b> 3,8			4 1.6	2 0.8	0,5
DEPT MARKETING & SALES	50	7 14.0	25 50.0	8.0	12 24.0	2 4.0	<del>.</del>	0.5
PERSONNEL	24	4 16.7	15 62.5	4.2	16.7			0.8
FINANCE	18	11.8	47.i	5.9	6 35.3		1 5,6	0.4
ENGINEERING	60	9 15.0	35 58.3	8.3	11 18.3	<del>.</del>		0.7
PRODUCTION	46	5 10.9	22 47.8	<u> </u>	18 39.1	2,2		0.3
PURCHASE & STORE	13	-	6 46.2	<u> </u>	53.8		-	-0.1
PROJECT	12	9.1	54.5	<u></u>	36.4		8.3	0.4
MANAGEMENT	12	8.3	58.3		25.0	1 8 3		0.3
OTHERS	-				-			
N A	1.8	2 11.1	61.1	1 5.6	22.2		_	0,6

People with specialized skills need to be rotated so that they get an overall experience of other related functional areas.

F2 & F3		S A M P L	S A	A	n s	D A	S D	А	M E A
TOTAL		253	33 13,1			41 16.3	1.6	0.8	0.7
DEPT	·MARKETING & SALES	5.0	6 12.0	34 68.0	4 8 0	6 12,0			0.8
	PERSONNEL	24	3 12.5	18 75.0	1 4.2	2 8.3			0.9
. :	FINANCE	18	1 5.9	11 64.7		29.4		· 5.6	0.5
	ENGINEERING	60	10 16.7	36 60.0	3.3	10 16,7	2 3.3		0.7
	PRODUCTION	46	6 13.0	32 69.6	2.2	6 13.0	1 2.2		0.8
	PURCHASE & STORE	13	1 7.7	69.2	7.7	15,4			0.7
	PROJECT	12	27.3	36.4	<del>-</del>	36,4		8.3	0.5
**********	MANAGEMENT	12	8.3	75.0	8.3	<del>.</del> .	8.3		0.8
	OTHERS	-							_
	N A	18	11.1	10 55.6		33.3			0,4

#### 6. Answers Concerning Rotation, Transfer, CDP

Most of the workers in our unit would not accept new assignments associated with a change of residence.

		T	1			<del></del>			T
	S A	s	A	N	D	s	N	М	
	М	A		s	A	D	-	E	
F1 & F11 & F12 & F13	P L	''			,,			Α	A
	E	,					Α	N	
LOCATION·····BANGALORE	123	3 2 26.0	51.2	8 6.5	20 16.3			0.9	
HYDERABAD	37	10 27.0		<del>-</del>	2 5,4			1.2	
PINJORE	17	23.5	70.6	<del>.</del> .	1 5,9			1.1	
KALAMASSERY	24	10	13 54.2		4,2		<del>-</del>	13	
AJMER	9	33.3	6 66.7	غ			<del></del>	1.3	
TUMKUR	10	20.0	60.0	10.0	10.0			0.9	
RANIBAGH	5	40.0	40.0	20.0			<del>.</del>	1.2	
AURANGABAD	2	<del>.</del> .	100.0	<del>.</del>			<del>-</del>	1.0	
CHO HMT (I)	26	11 42.3	14 53.8	_	1 3.8	-		j.3	

The criteria for manpower allocation/transter/rotation in HMT are not clear.

• • • • • • • • • • • • • • • • • • • •	4.00			. :	٠.			
	S		-				N .	м
	Α	S	Α	N	<b>D</b> , .	s		E
	M	Α		s	A	Œ		
F2 & F3	Ĺ							Α
· ·	E .			:			Α	N
TOTAL	253	42 16.9	173 69.5	5 2.0	28 11.2	0 4	1,6	0.9
TOTAL	 ļ	27	124	4	1.9		3	
PS GRADE · · D G M (PS VI)	177	15.5	71.3	2.3	10.9		1.7	0.9
J G M (PS ₩2)	 51	14 28.0	33 66.0	-	3 6,0	-	2.0	1.2
G M (PS K)	 14	-	9 64.3	-	28.6	7.1		0.2

Individual career development plans should also be considered while allocating jobs to people within the Manpower Plan.

F2 & F3				S A M P L E	S A	Α	N S	D A	S D	N A	M E A N
TOTAL				253	45 18.4	201 80.4		2 0,8	_	3 1.2	1,2
PS GRADE · D	G M	(PS	Yī()	177	36 20.7	136 78.2	0.6	1 0,6		3 1.7	1.2
J	G M	(PS	<b>₩</b>	51	13,7	43 84.3		2.0			1.1
G	М	(PS	IX)	 14	1 7,1	92.9	_		<u> </u>	_	1.1

# 6. Answers Concerning Rotation, Transfer, CDP

The current system of career development should be revised to make it more objective.

F2 & F3	S A M P L E	S A	A	n s	D A	S D	N A	M E A N
TOTAL	253	29 11.6		8 3,2	11 4.4		3 1.2	1.0
PS GRADE D G M (PS WI)	177	21 12.0	141 80.6	5 2.9	8 4.6	<u> </u>	1.1	1.0
J G M (PS WI)	5 <b>l</b>	5 10.0	40 80.0	4.0	3 6.0	] <u>.</u>	2.0	
G M (PS X)	14	_	13 92.9	7.1		<del>.</del> .		0.9
OTHERS	8	12.5	87.5		<u>-</u>		_	1.1
N A	3	66,7	33 3			<u> </u>	_	1.7

The current system of career development should be revised to make it more discerning — to identify high fliers.

F2 & F3	S A M P L	S A	A	N S	D A	S D	N A	M E A N
TOTAL  PS GRADE · D G M (PS VII)	253 177	26 10.4 19 10.9	125		25 10.0 18 10.3	0.4	2 0.8 2 1.1	0.8
J G M (PS W)	51	6 11.8	36 70.6	3.9	6	1 2.0		0.8
G M (PS K) OTHERS N A	8	12.5	100.0 5 62.5 3 100.0	12.5	12.5			0.8

