

Productivity Linked Wage System

FOR LONG TERM COMPETITIVENESS

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Tutor Introduction

- Head Innovation & Quality Centre (IQC) / Management Consultant, NPO Pakistan
- Team Leader Benchmarking
- Member President Productivity Award Team
- Masters in Computer Sciences (M.Sc.)
- B.Sc. Mechanical Engineering
- NPC Malaysia Certified Productivity Specialist
- Lead Auditor ISO9000: 2000
- Provided ISO-9000, TQM, Kaizen, 5-S Japanese Technique, BPR, Organizational Excellence consultancy to more than 10 companies
- Provided on-job training to more than 40 companies
- More than Five years experience in the field of Quality & Productivity
- Member Pakistan Engineering Council
- Member Productivity Association of Pakistan

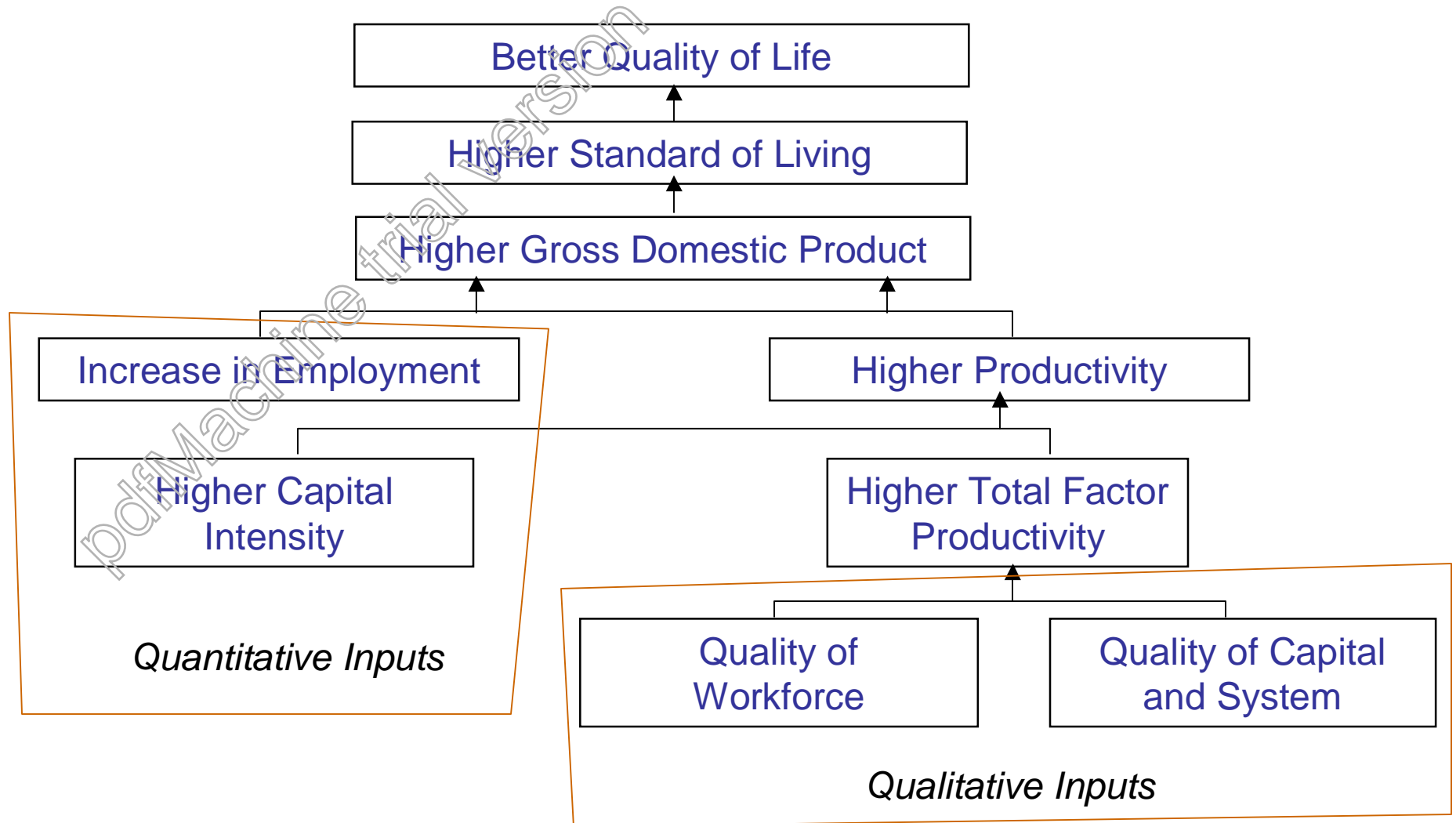
Objectives

- To address **internal customer** perspective in TQM
- To address **competitiveness** and **productivity** in the real sense
- To **share knowledge** with the participants regarding the implementation aspects of **Productivity Linked Wage System**

Productivity Linked Wage System

- The Productivity-Linked Wage system is a system which establishes a closer link between **wages and productivity** so as to **enhance competitiveness**.
- Ensures that wage increases commensurate with higher productivity increases.

PRODUCTIVITY FRAMEWORK



5 ways to Improve Productivity

Reduced Cost

$\frac{\text{Output}}{\text{Input}}$ \longleftrightarrow

\downarrow

Manage Growth

$\frac{\text{Output}}{\text{Input}}$ $\uparrow\uparrow$

\uparrow

Work Smarter

$\frac{\text{Output}}{\text{Input}}$ \uparrow

\longleftrightarrow

Pare down Output

$\frac{\text{Output}}{\text{Input}}$ \downarrow

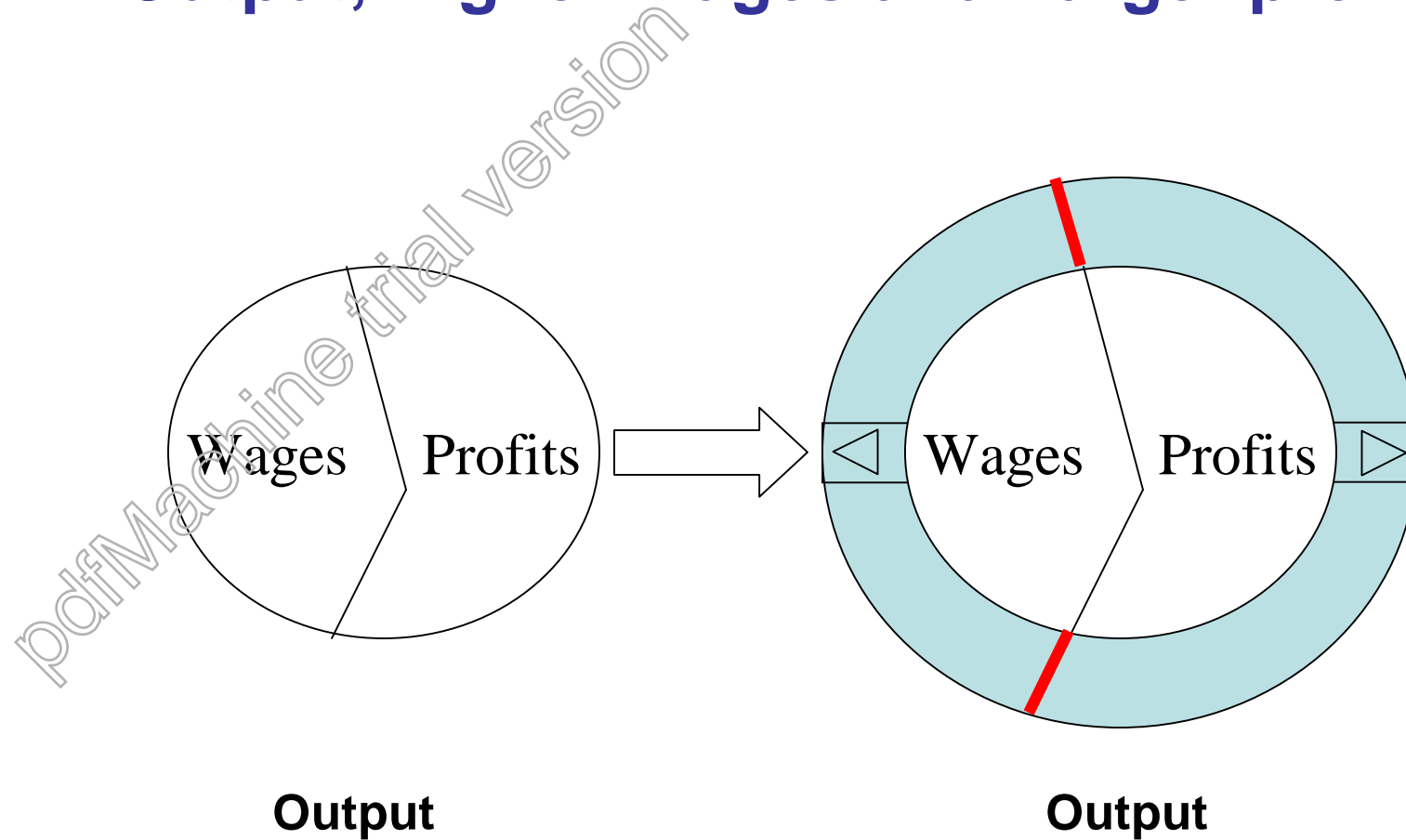
$\downarrow\downarrow$

Work Effectively

$\frac{\text{Output}}{\text{Input}}$ \uparrow

\downarrow

Improve Productivity Leading to Bigger Output, Higher Wages and Larger profits



The present Wage System

In the private sector, the wage structure may be in the form of

- Salary scale
- Salary range
- Minimum and maximum annual increment
- Collective Bargaining

The main weakness of the present wage system

- The general trend of wage increase is rapid and not related to productivity improvement;
- Annual increments are pre-determined and are given automatically to all workers regardless to the level of performance;
- Remuneration is not related to company performance;
- Collectively agreements are usually fixed of RA period of there years and are binding on both parties
- Terms in the collective agreement cannot be reduced even when a new agreement is being conclude.

Linking wages to productivity makes the following possible

- ✓ Higher wages for worker and higher profits for companies
- ✓ Greater competitiveness for companies

KEY ELEMENTS OF PLWS

Fixed Component

- Basic wage
- Annual increment
- Contractual bonus (where applicable)

Variable Component linked to

- Productivity & Performance

Wage increase of the year based on

productivity / profit sharing formula

3 TYPES OF MODELS

- Profitability Model
- Productivity Model
- Combined Model

THE PROFITABILITY MODEL

Fixed Component

- ✓ Basic wage
- ✓ An annual increment

Variable Component

Variable Component

A variable component performance bonus to be determined by a profit-sharing formula and where applicable

- a) The formula is to be agreed upon between the management and union; and spelt in the **collective agreement** or through **consultation** for the non-unionized sector
- b) Wage incentive is paid when profits have exceeded a **predetermined** or **threshold level** which can be calculate based on return on investment, return on Assets, return of equity and the average profit earned over a number of years in the past

Formulation

1. Define level of profit to use:

- Absolute Form-Rs Quantum of profit
- Relative Form

2. Determine the threshold profit level:

- Historical Data
- Magnitude of the Profits

Example: Quantum of bonus

According to profit levels

Profit After Tax Million (s)	Bonus Month (s) Salary
<1.5 (threshold)	0
1.5-1.99	0.5
2.0-2.49	1.0
2.5-2.99	1.5
3.0 and above	2.0

CASE EXPERIENCE 1

Profitability-liked bonus

(extracted from a **collective agreement** concluded)

Fixed Bonus

The Company shall pay an annual guaranteed bonus equivalent to one month of the last drawn basic salary.

Variable bonus :

Should the company make a profit of Rs. 1,500,000/= to Rs. 2,500,000/=, the company shall pay one half (1.5) month of the last drawn basic salary bonus;

Profits exceeding Rs. 3,000,000/=, bonus payment shall be two months of the last drawn basic salary

Notwithstanding the above, the guaranteed bonus of one month, based on last drawn basic salary, shall continue to be applicable

CASE EXPERIENCE 2

Merit and Profit sharing scheme

The Scheme consist of two components:

- a) Fixed Component which comprises of **basic wage** plus an **annual increment of 3%** of basic salary and an **annual bonus** of one month's basic salary.
- b) Variable Component, among the tools use to determine the variable component are **profit sharing** and **personal performance review (PPR)**

PROFIT SHARING

Example

Shareholder's fund	Rs 4.0 million
Retained Earnings	$12 \frac{1}{2} \times \text{Rs } 4.0 = \text{Rs } 0.5 \text{ m}$
Profit tax	Rs 2.5m
Amount for sharing	$\text{Rs } 2.5\text{m} - \text{Rs } 0.5\text{m} = \text{Rs } 2.0\text{m}$

DISTRIBUTION OF PROFITS

50 percent of profits to shared

$$\frac{\text{Available of sharing}}{\text{Total Payroll}} = \frac{\text{Rs 1 million}}{\text{Rs 2 million}} = \text{Rs. 0.5 months Basic salary for each employer}$$

50 % to be distributed base on employees performance using the **Personal Performance Review (PPR)**

A unit of employees earning an average basic salary of Rs 1000 with the following bonus points will be **PPR scores x Salary**

PPR scores x Salary

1.	60 x Rs1000	= 60,000
2.	70 x Rs1000	= 70,000
3.	80 x Rs1000	= 80,000
4.	90 x Rs 1000	= 90,000
5.	100 x Rs 1000	= 100,000
Total		= 400,000

CASE EXPERIENCE 2

If this unit is entitled to Rs 5,000 bonus (based on normalization as compared to other units) then the bonus payment will be:

$$\text{Bonus payment} = \frac{5,000}{400,000} = \mathbf{0.0125 \text{ per bonus point}}$$

Each employee in the unit will get the following bonus payments based on PPR scores:

- a) $0.0125 \times 60,000 = \text{Rs } 750$ (0.75 mths. Basic salary)
- b) $0.0125 \times 70,000 = \text{Rs } 875$ (0.875 mths. Basic salary)
- c) $0.0125 \times 80,000 = \text{Rs } 1000$ (1.00 mths. Basic salary)
- d) $0.0125 \times 90,000 = \text{Rs } 1125$ (1.125 mths. Basic salary)
- e) $0.0125 \times 100,000 = \text{Rs } 1250$ (1.25 mths. Basic salary)

Total bonus paid based on profitability and performance of the 5 employees are

- a) $0.5 \text{ mths} + 0.75 \text{ mths} = 1.25 \text{ mths basic salary} = \text{Rs } 1,250$
- b) $0.5 \text{ mths} + 0.85 \text{ mths} = 1.35 \text{ mths basic salary} = \text{Rs } 1,350$
- c) $0.5 \text{ mths} + 1.00 \text{ mths} = 1.5 \text{ mths basic salary} = \text{Rs } 1,500$
- d) $0.5 \text{ mths} + 1.25 \text{ mths} = 1.625 \text{ mths basic salary} = \text{Rs } 1,625$
- e) $0.5 \text{ mths} + 1.25 \text{ mths} = 1.75 \text{ mths basic salary} = \text{Rs } 1,750$

THE PRODUCTIVITY MODEL

Fixed Component show stability

- ✓ Basic wage
- ✓ An Annual increment

Variable Component

- ✓ A variable productivity payment to be determined

FORMULATION

$$T = A + P$$

where

T = Wage increase

A = annual increment

P = variable productivity payment

Example

Year 1

If basic wage = Rs 1000 per month, A=2% and P=4%

Basic wage +A=Rs 1000 +2% (Rs 1000)=Rs 1020

(built into basic wage).

P=4% x Rs1000 x 12 months =Rs 480 per annum

Example – contd...

Year 2

If basic wage=Rs1,020; A=2% and P=4%

Basic Wage +Annual Increment=
Rs 1,020+2% (Rs1,040per month)

$P=4\% \times \text{Rs } 1,020 \times 12 \text{ months} = \text{Rs } 489.60 \text{ per annum}$

Annual Variable Payment at end of year 2:

P for year 1	Rs 480.00
P for year 2	Rs 489.60
Cumulative for consecutive years	Rs 969.60

CASE EXPERIENCE 1

Productivity-linked Payments

The B. Braun's scheme is one example of that the Court considered a fair and suitable method of rewarding increased productivity. There is scarcity of information on the concept to productivity, the standard to be used and the rewards to be given for increase in productivity and the measurement of productivity. Therefore the B. Braun award is as stated below:

EFFICIENCY AND QUALITY INCENTIVE BONUS (EQIB)

GUIDING PRINCIPLES

- 1) Proper wage determination I-e pay the value-of-job
- 2) Pure productivity related pay.

THREE TYPES OF BONUSES

- Quantity
- Quality
- Time Utilization

DETERMINATION OF EFFICIENCY AND QUALITY

Efficiency:

Standard time based on MTM or time study

- Fully transparent
- All actions accounted for
- Discussed with unions/employees
- Agreement inevitable due to objectivity

Quality:

Yield/Wastage/Rework acceptable percentage

- Requires top management commitment
- Needs trust from both ideas

Determination of Bonus-simplified Table

Productivity		Wastage/Rework Level		
%	Rs	0-2%	2-4%	Above 4%
100	0	20	10	0
110	30	40	30	0
120	60	70	60	0
130	90	90	70	0
140	110	90	70	0
150	130	90	70	0

BONUS PAYMENT BASED ON EQUIB TABLE

1. When productivity is 100% wastage/rework level is above 4%, there will be no bonus payment paid.
2. When productivity is 150% wastage/rework level is less than 2%, the bonus payment will be:

Productivity payment	Rs 130.00
Add Quality Payment	Rs 90.00
Total	<hr/> Rs 220.00

Case Experience 2

Example of bonus computation

(depends on sales and profits)

	Business Plan 1 2002		Previous Year 2 2001	
Sales	Achievement	25pts.	Achievement	25pts.
	Standard	100%	Standard	100%
Profit	Achievement	25pts.	Achievement	25pts.
	Standard	100%	Standard	100%

Example of Bonus Computation for Year 2002

Sales vs BP	Sales vs LY
Achv: 120(25pts) Std: 100 $\frac{120 \times 25}{100} = 30$	Achv: 115(25pts) Std: 100 $\frac{115 \times 25}{100} = 28.75$
Profit vsBP	Sales vs LY
Achv: 90(25pts) Std : 100 $\frac{90 \times 25}{100} = 22.5$	Achv: 95(25pts) Std : 100 $\frac{95 \times 25}{100} = 23.75$

Aggregate Points = $30 + 22.5 + 28.75 + 23.75 = 105$

Bonus Payment for 2002

Aggregate Points	< 3yrs service	< 3yrs service	< 6yrs service	< 9yrs service
100 points or more	1.25months	1.5months	1.75months	2.0months
90-109 Points	1.0months	1.25months	1.5 Months	1.75months
89 Points or less	0.5months	1.75months	1.0months	1.25months
<p>Example: With the aggregate point of 105 and 7 years of service, an employee will get 1.5 month bonus</p>				

CASE EXPERIENCE 3

Saleable Output

Input

- Assuming production output per month=5,000
- Pieces and standard production time is two hours for 5,000 pieces.
- Estimated number of employees =80; number of working days, 20 @ 8 hours a day per month.

Other factors taken into account:

Annual leave taken = 40 hours Reject: 2%

QCC Activities = 25 hours

Training = 15 hours

CASE EXPERIENCE 3 – contd...

Out put = 5,000 pieces × 2 hours = 10,000 hours **less rejects**
(10,000 × 2% = 200) = 10,000 - 200 = 98,00

Inputs = 80 × 8 hrs × 20 working days = 12,800
(no. of employees × production hours per day × no. of working days)

Less allowance for annual leave and QCC = 40 + 25 = 65
(however training hours are included as inputs)

Total inputs = 12,800 - 65 = 12,735 hours

Productivity = 9800 / 12,735 = 0.769

CASE EXPERIENCE 3 – contd...

Incentive payment Chart (Monthly)

Productivity Ratio	Pay-out (Rs)
0.50-0.54	10.00
0.55-0.59	15.00
0.60-0.64	20.00
0.65-0.69	25.00
0.70-0.74	30.00
0.75-0.79	35.00
0.80-0.84	40.00
0.85-0.89	45.00
0.90 and above	50.00

Based on the above table, the productivity ratio of 0.769 falls within 0.75-0.79. Therefore, each employee will receive Rs. 35.00 incentive payment

Case Experience 4

Sales Incentives for New Sales Acquired (one Time Payment)

Sales value (Rs)	Sales Incentive(Rs)
< 100	10.00
101-999	20.00
1,000-1,999	30.00
2,000-2,999	40.00
3,000-3,999	50.00
4,000-4,999	60.00
> 5,000	70.00

Skills Allowance

Multiskilling

- Sales representatives who are involved in a one-man operation which requires them to load/unload.
- Company products in their course of day to day selling activities.
- Staff that are not drivers but are required to perform tasks of drivers and possess a valid driving license
- Staff nurses who possess recognized post basic certificates and are required to sever in the relevant units

Acquisition of additional knowledge and skills

- An employee is required in the course of duty to use languages other than Urdu, Punjabi, English, etc.
- Workers such as mechanists, electric charginan who possess competency skills certificate in their areas of work.

Multi-skilling Allowance (Example 1)

- Multi-skill 1 – Rs 15.00
- Multi-skill 2 – Rs 15.00
- Multi-skill 3 - Rs 15.00

Payments will be made for up to 3 skills only
Provided these have been certified by the supervisors or department head and the employee must perform at least 10 hours of the activity a month.

Multi-skilling Allowance (Example 2)

- If an employee can perform at least 4 workstations then he can be entitled to a one off payment of one salary increment.
- Reduces idle workers
- Reduces high overtime payment

The Combined Model

Productivity / Profitability Matrix

Takes into account both
productivity and profitability

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The Combined Model

Example:

Payment of bonus according to different profitability and productivity levels.

Annual Profit	Months of Basic Wage					
Above 1.49	1.00	1.00	1.25	1.50	1.75	2.00
1.00 – 1.49	0.75	0.75	1.00	1.25	1.50	1.75
0.70 – 0.99	0.50	0.50	0.75	1.00	1.25	1.50
0.50 – 0.69	0.25	0.25	0.50	0.75	1.00	1.25
Below 0.50	0	0	0.25	0.50	0.75	1.00
Productivity Ratio	< 1	1–2.49	2.5-4.99	5-7.45	7.5-9.99	> 10

FACTORS FOR SUCCESSFUL IMPLEMENTATION

- Satisfactory labour-management relations
- Realistic annual increments
- Challenging and equitable variable payment
- Formula for variable payment
- Applied company-wide
- Allow for transition period
- Wage system should be
 - ✓ Specific
 - ✓ Measurable
 - ✓ Achievable
 - ✓ Realistic

Benefits of PLWS

- The system will ensure that employees obtain **fair share** of the **gains form Productivity / Performance** improvement
- Provides **motivations or good performance**
- Provides a more flexible wage structure that is able to **withstand economic uncertainties**
- **Enhances competitiveness** in the global economy.
- **Ensures job stability** and reduces the likelihood of retrenchment in bad times.

A CASE STUDY

MALAYSIA

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Recognizing the weakness of the current wage system, the Malaysian Government had initiate a tripartite task force to develop guidelines on Wage Reform System which is linked to performance and productivity.

Guidelines on Wage Reform System 1996

- ✓ To establish a closer **link between wages and productivity** so as to **enhance competitiveness** and promote **employment stability**
- ✓ To enable employers to develop a wider and systematic approach towards **improving productivity and wages** through the active involvement and cooperation of their employees
- ✓ To enable employees to obtain a **fair share of gains** that arise from productivity growth and performance improvements thereby **promoting equity, social cohesion** and **enhancing the quality of life** as well as developing **improved skill-related career path** and increasing **job satisfaction**

Issues on linking wages to productivity for long term competitiveness was appropriately addressed in the:

- ✓ National Vision Policy
- ✓ Third Outline Perspective Plan (OPP3) 2001-2010
- ✓ Eighth Malaysia Plan (8MP) 2001-2005)
- ✓ National Economic Recovery 1998
- ✓ Budget 2002

National Vision Policy one of the thrust of the NVP

**“Enhancing competitiveness to
meet the challenges of
globalization”**

Third Outline Perspective Plan (OPP3)

- ✓ It is critical that **wage increase commensurate with increases in productivity** so that the **competitiveness** of the economy is further enhanced during the OPP3 Period.
- ✓ **Wage increases**, which **reflect productivity gains**, will **ensure** that there is **no undue pressure on prices** and **erosion of real incomes**.
- ✓ In this regard, the adoption of the guidelines for a **Productivity Linked Wage Reform System** established in 1996, to ensure a closer link between wages and productivity performance, will be **intensified through efforts such as seminars, workshops company visits**.

The Eighth Malaysia Plan 2001-2005

“Accelerating the implementation of the productivity linked wage system whereby first will be encouraged to intensify the implementation of the productivity linked-wage system to ensure that wages are closely linked with productivity”.

National Economic Recovery Plan 1998

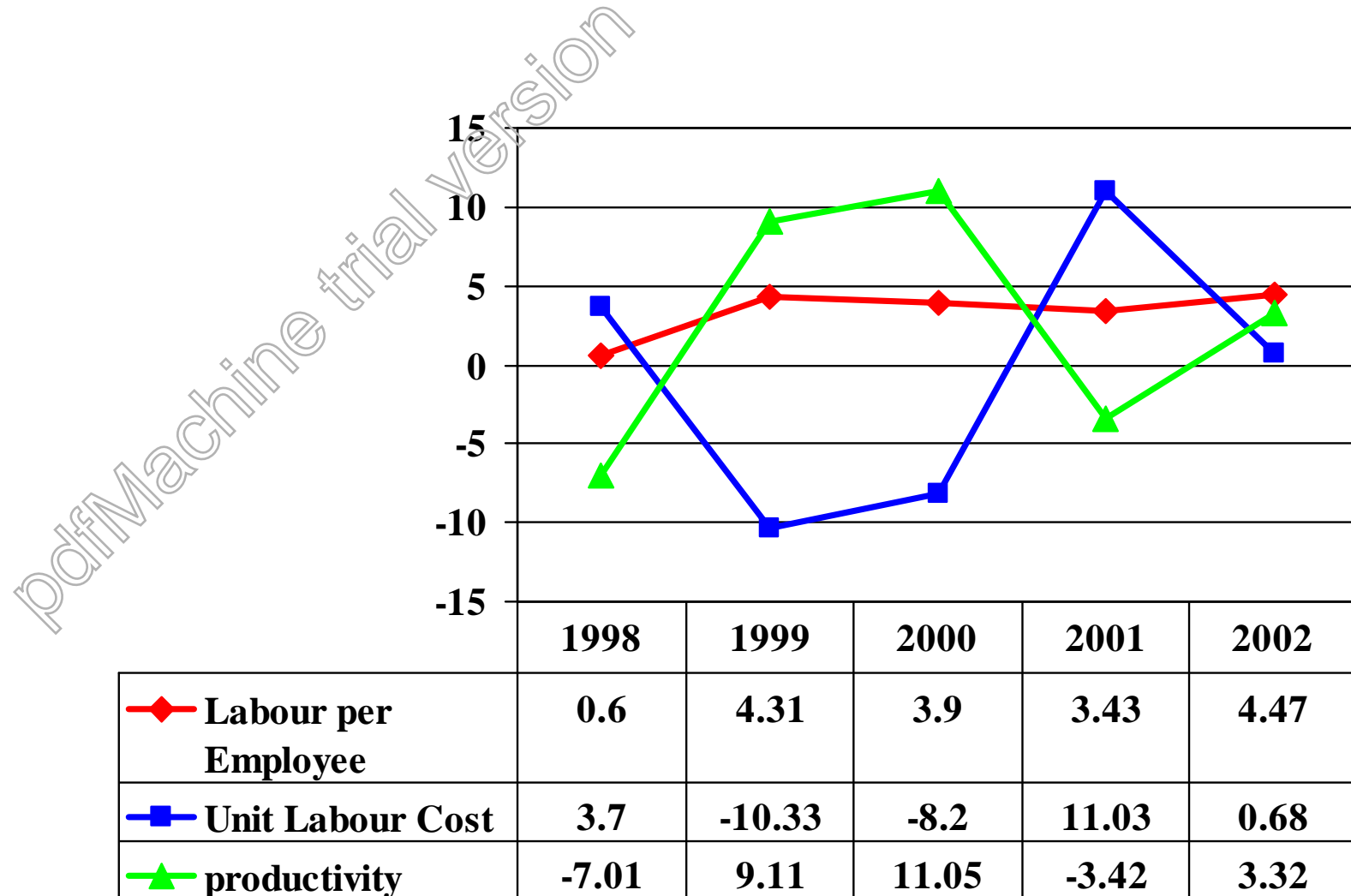
“ Wages increases should reflect productivity gains of the country to maintain its competitive advantage”

The NERFP recommended the implementation of a flexible wage system that is linked to productivity

Budget 2002

The restrictions of tax deductions on bonus payments which was limited on two months, was also abolished in order to give employers the flexibility to offer remuneration which commensurate with workers productivity

Growth of Productivity, Labour Cost per Employee and Unit Labour Cost in the Manufacturing Sector, 1998-2002



Quarterly Growth of Productivity, Labour cost per Employee and Unit labour Cost of the Manufacturing Sector

% Growth	1 st Q 2001	1 st Q2002	1 st Q 2003
Productivity	3.51	-3.43	10.35
Labour Cost per Employee	5.53	1.91	5.23
Unit Labour Cost	1.93	5.51	-4.54

System

Measurement

Improvement

Learning

Environment

Sharing

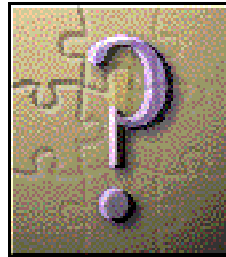
**“Management’s job is to find out
what it’s doing that keeps people
from doing a good job, and stop doing it”**

**“If you make your employees feel like family,
they will act like family”**

**“Make your workers rich,
and they will make you rich”**



THANK YOU



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