**Theme:** 4.

**Reading:** Time-and-Motion Regained.

**Author:** P. Adler.

*Typical View:*

**Standardisation is the death of creativity, prevents continuous improvement and innovation. Brings about a vicious circle:**

1- Routine and repetitive tasks require standardisation to be efficient and of high quality.

2 - High levels of standardisation reduce interest, motivation and creativity.

3 - Demotivating work leads to alienation and dysfunctional behaviour; absenteeism, high turnover, strikes etc.

4 - Counterproductive behaviour elicits more bureaucracy.

*The organisation builds on dehumanising logic of coercion and reluctant compliance.*

**NUMMI** (New United Motor Manufacturing Inc.)

Built on the *logic of learning* and not of coercion.

-Procedures are designed by workers, not engineers.

Management benefit: -Quality and productivity improves.

Workers benefit: -Job satisfaction/motivation improves. They receive more power.

Organisation benefits: -Bureaucratic system to encourage learning, capture and communicate innovation and institutionalise continuous improvement.

**The Worst Plant in the World**

*GM Plant at Fremont, CA.*

-Absenteeism: 20% - 25%.

-Productivity: Low.

-Quality: Low.

-Substance Abuse: High.

*Changes:*

-Copied Toyota’s production process.

-Rehired old GM workers.

-Educated team leaders and management team in production process.

-Got Union cooperation.

*NUMMI Plant at Fremont, CA.*

-Absenteeism: 3% - 4%.

-Productivity: very high.

-Quality: very high.

-Substance Abuse: minimal.

-Participation: Very high. 26% (1986) to 92% (1991).

-Satisfaction: Very high: 90% of employees were Satisfied/Very Satisfied.

**Fear, Selection, Socialisation**

Speculative reasons for improvements:

*1) Closing plant causing unemployment created cooperation/hung the threat overhead.*

-Coercive techniques weren’t used, because employees would’ve fallen into old patterns.

*2) Trouble-makers were weeded out in recruitment.*

-NUMMI rehired the entire union hierarchy, which included well-known militants.

-Unions also got second chances for applicants who failed drugs tests.

*3) NUMMI used a comprehensive socialisation process during recruitment to instil new values into employees.*

Divisions between management and workers were removed:

-Special parking.

-Separate eating facilities.

-Identical dress code: Uniforms for everyone.

**The NUMMI Production System**

-Proper system developed.

-*Kaizen* - Continuous improvement system.

-System specifically designed to detect faults.

-Each job is analysed to achieve maximise efficiency and quality.

-Each worker is cross-trained in all team assignments and job rotation is standard.

-Planned production eliminates variations in daily/weekly schedules.

Distinctive from other Americans because:

*Strong commitment to the social context in which work is performed.*

-Builds atmosphere of trust and common purpose.

-Consistency of strategies and principles.

-Effective communication.

-Structure: teams of 5-7 plus a team leader, groups of 4 teams plus a group leader(mgmt).

Small teams encourage group decision-making and bonding.

-No lay-off policy.

-Simplified job classification, single wage bracket.

**Standardised Work**

-Intelligent interpretation of Taylorism.

Team members analyse each task on basis of efficiency, safety and quality.

-Employee motivation/self-esteem improved/balance of power shifted.

-Capacity to learn and innovate improved.

-Safety improved/injuries declined.

-Quality standards rose.

-Inventory control made easier: process flowed more smoothly.

-Job rotation became more efficient and equitable: absences less problematic.

-Flexibility increased: respond to fallen demand e.g. slow production speed.

-Empowerment of employees by allowing them standardise the work. No resentment.

**Continuous Improvement**

-Standardisation is a stimulus to employees to continually improve.

-Each worker is an expert - each workstation becomes an inspection/innovation point.

-Inefficiencies/problems are quickly spotted.

-Management is a support system rather than an authority system.

-Help is available to teams to solve problems.

-Engineers available to help analyse and develop complex employee suggestions.

*1)Traditional Taylorism vs. 2) learning orientated NUMMI version.*

1-Process designed to be ‘idiot-proof’.

1-Wastes ability of workers to adapt to unpredicted situations or make it more efficient through changes.

1-Adversarial relationship.

2-Process is challenging to learn but more fulfilling and flexible once learnt.

2-Utilises workers intelligence and initiative.

2-Cooperative and dynamic relationship.

-Suggestion program is transparent and informative to try encourage participation.

**The Psychology of Work**

It is incorrectly assumed that workers will avoid work.

This infantile psychology is wrongly applied because it excludes three key motivations:

1) - Desire for excellence/pride of workmanship.

Training programs increased competency and improved personal feelings of competence.

2) - Mature sense of realism.

Workers motivated by their recognition of international competition. Realise that they may have had poor luck with education etc and accept that an auto-assembly-line job is no utopia but they can make it better by cooperation.

3) - Positive response to respect and trust.

Management quickly provided workers with their requirements, new gloves, mats etc.

Workers reciprocated by informing management that they didn’t need chrome water fountains - they found plastic ones for half the price.

Management created team accounts to purchase new supplies without prior approval.

*This led workers to believe that they and management shared the same objectives.*

**Power and Empowerment**

Hierarchical Power:

-A typical bureaucratic structure with several well-populated management layers.

-Designed to support but not coerce.

-Combined decision-making.

Power between Management and Labour:

-Union and workers given more power.

**Potential Pit-falls**

-Empowerment degenerates into exploitation if workers are not given a sufficient voice throughout the organisation.

-Empowerment degenerates into abandonment if workers are not given the correct tools, training in their use and support in their implementation.