

# On the Shopfloor

A personal account of work in the IT industry: India

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I worked in a prime Information Technology Company for two years. IT companies are said to be like heaven for workers. Freedom, creativity and play are the kind of words you get to hear in any description of an IT workplace. After all, it is said, this new workforce works in a state-of-the-art environment with luxuries such as air-conditioned shop-floor, uninterrupted Internet connectivity, e-mail, music, free coffee & tea and so on. Working hours are said to be flexibly designed to suit the workers, and the work highly creative.

In the following write-up, I am trying to examine the truthfulness of these claims about the IT industry.

## *Description of the work process*

The work process in the factory I worked in was organised in the following manner.

### 1 The hierarchy of the production line

#### Management Staff

- > **Divisional Head:** Permanent Post - Manager. Responsible for all kinds of projects.
- > **Project Leader (PL):** Permanent Post - Supervisor. Projects are divided into categories, and responsibility for each project is given to an assigned Project Leader.
- > **Group Leader (GL):** Permanent Post - Junior Supervisor. Project Leaders distribute their share of projects to their subordinate Group Leaders. These people plan the schedule of the projects according to guidelines set by productivity norms.

#### Non-management Staff

- > **Project Owner:** Temporary responsibility - Worker. Group Leaders select a particular worker to handle each project. This person is held primarily accountable for the fate of the project.
- > **Peers:** Temporary responsibility - Worker. Project Owner is provided with a few peers for the production of the project. Sometimes the Project Owner is him/herself supposed to produce the whole project, and no co-workers are provided.

### 2 Division of labour in the projects

- > **Info-searchers:** Group of people who do research on the subject, and provide the basic framework of the project.
- > **Instructional Designers (ID):** They write the scripts on the basis of the framework provided by the Info-search team.
- > **Graphics Designers (GD):** Graphic designers first visualize graphics on the basis of script, and then create the graphics.

- > **Constructors:** These people assemble the text and graphics together to shape the final product.
- > **Testers:** After the product is ready, testers test the constructed project for any defects.

Testing is also done at every level. For instance, after the script is ready, it is tested and scrutinized by Subject Matter Expert (SME). Similarly, after the graphics are created on the computer for delivery to the constructor, the group leader of the particular team reviews them for graphic and aesthetic standards along with the SME.

### **3 Organisational mechanisms of work**

#### > **Deadlines**

Each step of production has its specific timeframe according to guidelines set by productivity norms, and this is called the Deadline. For example, 45 graphics are supposed to be made within one day. If a project has 600 graphics, it means that the graphic designer is supposed to complete his/her work within 13.3 days. Everybody, from the Info-searcher to the Tester, has to follow the set productivity norms. And the whole project, of course, has a Final Deadline.

#### > **Bug Report & Review Changes**

After each level of testing, the concerned worker is provided with a bug report that spells out mistakes that have to be fixed within the timeframe of the running project. The final bug report, which is supplied after the completion of the project, eats into the timeframe given for the next project. No extra time is allowed for any changes that may be required. This continuous process of responding to the bug report for the old project/s, and the execution of the new project, always run simultaneously. Therefore, an extra two to three hours of work is informally mandatory for these 'fixes'.

#### > **Training Sessions and Meetings**

Frequent training sessions and meetings come in the way of the project schedule, and for these too, no separate time slot is assigned. These are generally (especially meetings) scheduled for the first hour of the day. Thus the quota of the day's work inevitably takes up more time than the nine-hour workday.

#### > **Productivity Norms**

Productivity norms for a project are fixed at the supervisor's discretion. The method of deciding new norms is usually as follows: The supervisor calls for an informal meeting, and then bargains with the workers on output quantity. The bottom line is this - Output should be at least x times more than the previous year's output, if not double. For example, if last year's output has been 25 graphics frames per day, then this year there have to be 45 graphics frames per day. When they begin to bargain, supervisors usually start with double the figure, or even more, but gradually agree to come down to the figure which higher management had probably asked for in the first place! The kind of bargaining that happens here is equal to any bazaar. Since the original quoted figure is set high, workers feel exhausted, relieved and resigned to achieve any lowering at all.

Another thing that needs to be kept in mind is that the bargain for quality has already

reached 'zero-defect' level. Anything below this implies inefficiency, which is penalized.

> **Data Capture**

Every day the worker is supposed to maintain a log of the work s/he has done. This process is computerized, and the data is stored in a common server. Time is quantified as one hour = 1 unit, and thirty minutes = 0.5 unit. Daily work output is fixed at a minimum of 6 units. This data capture plays an important role during the half yearly and annual assessment reports.

> **Assessment**

There is a half yearly as well as an annual assessment of the work done by a worker. These reports take into account Productivity, Quality, Maintenance of Data, and Report of Project Audit. If all these requirements are not adequately fulfilled, the worker is labelled an inefficient worker and s/he is penalized. At the least, yearly increments are withheld.

**And how the work process works.**

*"The horizontal staircase"*

**The hierarchy of the production line**

Although hierarchy within the work-process is distinctly defined, yet management persistently projects an image of non-hierarchical relations within the company. Only the manager enjoys the luxury of a separate room. The PLs and GLs share similar workstations as workers on the shopfloor. However, their workstations are strategically located: either ensuring that their screens are hidden from workers, or located close to the exit door or server room. This helps in a more efficient monitoring of the workforce.

Management staff generally tries its best to maintain this non-hierarchical façade. Due to the similarity of social backgrounds of the workers and the management staff, it is fairly easy for them to do so. There is an attempt at easy camaraderie through jokes, film gossip and technical discussion.

Sometimes, even they tire of these pretensions. The PLs, especially, can't resist asserting their superiority and 'relaxing' during lunch hour. Although workers and supervisors are meant to have lunch together, they are seldom seen at the same table as the workers.

Other indices of difference: Cars are a more common phenomenon amongst management staff rather than workers. Most workers are relatively casual in their dress code, while management is more formally dressed. However, with their bags, baggage, lunch boxes and water bottles management personnel appear to be carrying their whole household with them! And the 'perk' of regular official visits to foreign countries is recounted through a narration of superior facilities, neatness and cooperation of the workforce everywhere else.

"...One of my relatives is a big manager in a company, his every movement and decision is hailed and celebrated in the family. Even when he goes to bathroom family members become as anxious as if the prime minister is going on an international tour..." A fellow worker's comment on management lifestyle.

Inspite of all this, supervisors work hard to maintain the pretension that they 'care'

about the worker, to the extent of trying to sort out even personal problems. In reality, this helps them keep a close eye on the movement and behaviour of workers. The most significant aspect of this practice is to reduce possible 'excuses' offered by workers on personal grounds.

In fact, during any crisis they are relentlessly critical of their subordinates. If a project faces any problems, they instantly locate the cause to be in the attitude of the worker. Their first assumption is that the problem lies with the worker.

*"Divisions within workers"*

### **Divisions involved in the projects**

The hierarchy of knowledge creates its own hierarchy even amongst workers. Info-searchers, for example, enjoy much higher management esteem than other fellow workers. Performance also plays an important role in interpersonal relation between worker and the management. So do schooling and social background. Workers from more affluent backgrounds are often found to be closer to management.

Workers are categorized in grades. Workers with more experience and better performance are promoted to higher grades. Beginners and slow workers are kept at the bottom. Obviously, the pay slip depends upon the grades. Thus, a kind of perpetual competition is generated in the work place. Workers from both grades are expected to perform similarly, whereas the wage difference between highest grade and lowest grade worker is 1:4.

*"To Order & Tame"*

### **Meetings & Trainings**

Meetings are generally held in the first hour of the day. One of the prime reasons behind this, as our supervisor said, is 'to make it a habit to reach office on time'. Two important phrases for meetings are, 'to be on time' and 'to be prepared'. It means 'save time' and 'remember whatever is said'. Every one is supposed to come with a pen and notebook.

Meetings are no less than a questionnaire session held by the supervisor or manager. Every meeting is a brain storming session. Meetings are organized to discuss the performance and problems of the company or the division. Any new policy taken by the company is declared in the meeting to mandatory applause.

Meetings are also called to discuss any 'crisis' of the company and help of the workers is 'sought'. And this 'help' is articulated in the form of greater work intensity or further cuts in benefits.

Meetings are the best platform to throw challenges to the workers. Unlike a playground, here challenges are imposed and have to be accepted. Opinions are always asked from the workers in the meetings but within a regimented 'openness'. The very presence of the manager or supervisor ensures that you may talk about a few things but will not talk of certain other things.

Training sessions are fundamentally the prime mechanisms to eliminate workforce 'excuses' including even such areas as communication skills. If somebody is unable to communicate smartly s/he is referred to 'communication training sessions'.

Everybody in the work place has to know comprehensively about the entire production

process. No one is left with the possible excuse of 'I don't know this' or even 'Why should I know this?' Technical workers are given training on non-technical subjects and non-technical workers are acquainted with technical know how. Sometimes, these training sessions are disguised so as to anticipate workers' behaviour. Through explanations of and discussions about the production process, management induces the workers themselves to locate the gaps in the production process. It encourages them to make suggestions, and then ensures that these gaps are filled up. Management never accuses anybody for being anti-work, it is said, and it is taken for granted that every worker is dedicated towards the company. It is just that they are a little 'laid back'.

Management skills are also imparted to workers in order to internalise discipline and organizational rules. Even psychological training is imparted so as to determine or construct the cause of 'low level of present productivity'.

*"The Fishy Market..."*

### **Productivity Norms**

One day, in 1997, our divisional manager called the workers from all divisions to tell us the story of China. There, he said, production is extracted at gunpoint. He then compared it to our good fortune of not being controlled by guns. But, he added, we have to find some method of increasing productivity without guns, since we have to match them output for output.

"So", he said, "let us dream of major leaps in productivity. Say a 1000% or 2000% increase. It is only if we dream like this that we can manage a 500% or 750 % increase".

Small groups of workers were then organised and commissioned to develop pilot projects to achieve such productivity levels using 'Tools Technological Development', 'Process Compression', or any other old or new method. And this 'challenge' was taken up by the creative and energetic workers...

After much research and experimentation, a great leap forward happened at all levels. New software was developed, the production process was redesigned, and discipline was rigorously imposed on leaves and office timings.

Pilot projects achieved 100% to 200% increase in productivity. Pretending disappointment, management implemented this increase in productivity all over the factory.

At the year-end meeting of 1998, graphic team members working on specific kinds of projects were called for a meeting in the Conference Room. The GL for those projects and the Graphic Project Leader (GPL; Supervisor who leads the whole graphic team in the division) delivered inspiring lectures on previous year's successes, along with data and charts as proof. However, at the end of the lecture the GL threw a challenge for the next year - "we have to be able to produce double".

Workers this time were not very keen to take on this 'steep challenge'. They bargained for a mere 50% increase. The GPL retorted with data about competitors of the company. Competitors in remote sections of the globe were supposedly producing at quarter the rate of the company. If the company didn't at least come down to half the cost, 'the contract might then be lost!' His serious face had tremendous power. Workers were slowly convinced, but with humane consideration productivity was increased only by 75%.

Needless to say, wages were never discussed in this entire process.

Productivity is never linked to salary. Instead, increase in productivity is projected as a necessity to survive and to be on top. Consciousness about company status - "To be on top!" is constantly propagated to generate consensus for further increase in productivity. The More you Produce, the More you Rise in Status!

*"...and the bargain"*

### **Annual Assessment**

The time for excuses and justifications. And, of course, denial.

The annual assessment report is divided into two sections. The first is the Individual Effective Feedback (IEF). In this section, team members are divided into groups and are supposed to give feedback to each other. It is done through a computer network. A list of questions is delivered to all workers, subdivided into categories such as communication, cooperation, performance, group activity etc. Each worker has to allocate points against each question for every peer. Name of the GL and PL are also included in the list. This means that workers have to give feedback on their supervisors as well.

To maintain the 'truth quotient' of the feedback, management claims that the IEF is not included in its annual assessment. However, every worker knows that this is not true. So they apply themselves to the IEF fairly 'creatively'. But if everybody gave full marks to every body else, then management would demand that the feedback form be filled up again. To prevent this, workers give higher points to those who are closer or friendlier to them. Unfortunately, workers who are not popular can suffer a great deal in this process.

The second part of the assessment is meetings between the GL and the workers. At this point, every aspect of the workers' performance is scrutinized. Achievements (productivity, quality, other responsibilities, audit etc.) are graded in three ways:

>M, M-S and S-O (below standard, up to the standard and above standard).

If a worker is graded as >M, the supervisor then enquires the reason for being so below standard, if M-S is achieved then the worker is asked why s/he didn't achieve S-O. Even if S-O is achieved, questions arise regarding group activity, communication etc.

Generally, reluctance to work and inefficiency are defended by workers through 'petty excuses'. Health, family problems, misunderstandings, miscommunication, etc. are presented as reasons. But management is always equipped with a ready answer to these problems - 'lack of dedication'. These meetings go a long way in making the worker believe that machine problems, physical limitations, heavy workloads are all just lame excuses. The real problem is attitude!

During these sessions, a number of personal questions are also asked to make the worker comfortable with the overwhelming aggression of the event. The worker fills up a six-page form, which includes level of performance, achievements and regrets, future plans and ambitions. As well as next year's training program. And redefining next year performance standards. The most important thing is that the worker himself/herself has to grade his/her own performance. The Supervisor allegedly only guides the worker through this.

Though productivity increases by leaps and bounds every year, wages do not. They have no bearing to the worker's productivity. Wage and increase in productivity act as inde-

pendent functions. The intriguing juxtaposition is that during productivity-defining meetings workers are valorised as 'members of the family' but during assessment sessions they are suspected as 'work thieves'.

"...The Info-searcher gave an estimation of 400 graphics while creating the graphics construction schedule, but during visualization I came out with 200 frames only. Thus according to schedule I had 10 days but actually I needed five and half days. I didn't disclose this to my GL, but during my assessment session he had all the data from the PL and grilled me on this issue. And I got >M". An unfortunate worker's confession.

"You can never win in this game, it's the only game in the world where you always lose". Frustrated worker at the end of the four-hour assessment session.

#### *"The Death trap"*

##### **The Deadline**

The Deadline is divine; nobody can challenge it. It rings like a prophet's doomsday call.

If the server has crashed, a virus has attacked or any technical problem has occurred, it is obvious that it is the worker whose data is affected who has to work late and recover this loss of time. Extension of the deadline is beyond imagination.

If somebody takes leave, it means double responsibility for his/her peer. This results in internal conflict between workers, creating suffocating work situations. This is inevitable because one can only expect understanding from one's co-workers for a reasonable number of planned leaves.

Managements also connect the deadline to the contracts with their clients. It is said that if the deadline is missed, the company has to pay a penalty to the client. And the penalty will obviously reflect on the workers' pay slip. This builds tremendous pressure on the workers. They try their best to finish their job within the deadline. Any delay by any individual worker puts the whole team in trouble. Thus every one is pushing each other all the time. The astonishing thing in this scenario is that often enough supervisors are replaced by the workers themselves! The supervisors have done their job merely by fixing the schedule.

#### *"Bugs"*

##### **The Bug reports**

*"After we die bugs come to our coffin and feast on our dead bodies".*

Each project has at least three to four levels of testing. Some are internal and some are external. To start with, tests are done by the subject matter expert (SME). Then, on the basis of guidelines provided by the client, testers scrutinize the project. After internal testers pass the initial stage, it goes to the client who checks it thoroughly. After that the next stage starts. Sometimes, this next stage starts even before the report comes from the client because of time pressure. After the project is over, it is scrutinized thrice internally and only then is it sent to the client. The client goes over the final product again, and if s/he finds any problem at this level, the company is penalized for each mistake. It means that by now the project has to be zero-defect.

From all these check points workers get thick lists of test reports i.e. bug reports. All bugs have to be rectified parallel to the already running projects. Often bug reports don't

reach the worker in a systematic way. To meet the construction deadline, testing runs parallel to scripting and graphic creation. As soon as one section is done, it goes for testing and while the next section is under construction the report for the earlier section comes up. At the first level of testing, the possibility of changes is 60% to 70%. Thus the workload actually increases by double. And by the end of the last section, bug reports pile up to such extent that they demand another project schedule altogether.

However, there are no extra days for these reports to be fixed. No extra time is planned in the project schedule for the bug report and the changes. These things have to be done within the same time frame. In truth, workers are actually working at higher levels than defined in any productivity norm.

All of these things result in long working hours, late night stays and a surrender of holidays.

*"Soul capture"*

### **Data capture**

The automation of supervision.

Even though the workday is fixed from 9am to 6pm i.e. nine hours, late night stays and sometimes skipping lunch make it ten to twelve hours long.

Through a computer network, a database is maintained to monitor every worker's productivity data on a daily basis. The software which is used for this purpose has built-in information about project code, kind of work, delivery options, etc. and the worker has to fill the time span s/he took to complete a particular job. Even tea and lunch breaks are defined in the software. Once the data is punched in, it cannot be changed.

Initially most workers used to avoid this data capture. But very soon it was made mandatory. Management may claim that this data capture has nothing to do with assessment, that they use this data as a yardstick to estimate and plan future project time-line, so that they can provide the client with a more accurate date for the deadline. But every worker knows that when assessment time comes, this data will become yet another management weapon.

I have tried to describe how my body and my mind were controlled in those two years. But I haven't even spoken of the other 'invisible' effects. The ever-increasing speed of productivity has taken its toll on my body. The hours of constant keyboard and mouse manipulation have resulted in spondylitis and arthritic problems. My back, my finger tips, my neck have all suffered. Obviously, management had always been aware of these repercussions. They had constantly supplied us with tips on health through emails and graffiti. Even aerobics were conducted to enhance our physical capacity!

But the really sad thing is my present relationship to music. Since music increases the speed of work and lessens the monotony of repeated typing and punching, it became a repeated infliction. Now it's difficult for me to listen to music and not type on my non-existent keyboard.