

Introduction

Some managers may ask the question: "Why should I be interested in workforce deployment and staff scheduling?" For many this question never even gets raised, and there lies the danger.

The business world is used to the analogy of "Sharks" to signify the dangers to good business. The business that takes a "Shark-bite" can easily be finished off in one go.

That is why conscientious managers usually do a good job of steering their business away from the high risk of deep "shark-infested waters".

However there lurks an equally and more common danger in the "calmer - almost comforting - waters" of familiar low-risk daily business routine.

The Piranha is a smaller fish in shallow waters which is harder to see and with a little bite, but when there are enough of them they are just as deadly as evidenced by the sudden, frantic and painful "splashing around" of job cutting to get profitability back on firmer ground.

Workforce deployment and staff scheduling is about avoiding both the "Shark-bite" and the smaller repeated "piranha-bites" to profitability that will almost certainly hurt or may even take the business down.

Workforce deployment and staff scheduling is directly linked to business profitability which requires good proactive management skills.

In 2006 Malaysian Airlines System Berhad (MAS) discovered issuing a memorandum to department heads about new shift hours isn't the same as doing something about it.

So when over 100 staff worked an extra 30 minutes a day because no one reduced their shifts the cost of over half a million dollars was one they could ill afford.

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The problems and obstacles faced by business managers struggling to meet their workforce scheduling requirements is now greater than they used to be, made more complicated by growing labor trends that demand flexible working arrangements.

This article highlights the problems businesses face, and how the right workforce scheduling software can focus the management skills of line supervisors and operational managers to deliver proactive cost-benefit strategies for staff scheduling in place of the reactive cost-cutting approaches of up-line senior management.



About Workforce Scheduling

The biggest single benefit of staff scheduling is the ability to plan farther ahead. The further you can plan ahead the more time you have to think about what you need to do. Conversely the further people know what they are working the better planning they have for their lives outside of work.

A recent posting to a web site for Community and Corporate Ethics¹ demonstrates the insight of at least one US worker had about the purpose of scheduling:

"Regular schedules ... ensure that associates can plan things around their regular days off. If there are regular schedules, it helps lessen the amount of time you have to ask off, therefore helping the company stay ready for the business it needs. You can rest assured that the higher ups in the company have a regular schedule".

Scheduling is generally about keeping production and service industries turning long after people need their rest - which means coordinating people.

What can often make scheduling difficult is people all want the same things. In some cases, like weekend working, it is probably understandable most people want their week-ends off. So scheduling is also about sharing poor shifts with good shifts across the workforce – that means teamwork. However different people with different circumstances may well have different priorities or values that are not commonly shared making such assumptions outmoded and outdated.

For example people are quite happy to work permanent nights, or at weekends, if this fits in with study schedules or a family care commitment.

A good manager needs to be seen addressing these kinds of preferences. Where it often goes wrong is when preferences are not balanced with the needs of the business requirement and expectations become confrontational.

A great way for a manager to head this off is having the ability to demonstrate alternatives that give people a choice. In the event no "perfect solution" exists one that meets "half-way" can go a long way.

Exploring alternative ways of working enables both employer and employee feel less like being "trapped" in old traditional conflicts.

Planning a structured scheduling strategy will avoid creating a "tail wagging the dog" workplace. Pleasing everyone may appear a noble goal but it is doomed to failure and will end up pleasing nobody – least of all the business



Who's Responsible?

Workforce deployment and staff scheduling is a management skill that lies strongest and is at its most effective when exercised at the Business or Operational Line Manager level.

"Decentralized management by foremen, secretaries, and team leaders is a must for us," emphasizes Helmut Tammen, who holds responsibility for time-management processes at Volkswagen. "After all, the knowledge is on site. The foreman has the best knowledge of when and where to assign a particular employee, notices that someone is missing more quickly than anyone else, and decides on the organization of employees and tasks immediately and independently." ²

Staff scheduling directly affects business profitability. The Manager who delegates the process elsewhere is effectively relinquishing an important control of the business and its profitability to another.

That doesn't mean to say the task cannot be delegated, but it does mean care must be taken as to where it is delegated because they will effectively be controlling the most expensive resource in the business.

Poorly coordinated staff is probably the single and greatest reason why staff become de-motivated and businesses performs poorly.

A more subtle delegation line is technology, made more attractive as it suggests less managerial involvement. Indeed this may be the case, but less does not mean best when it comes to management.

Self-rostering technology is one such example where scheduling is delegated to staff so they can ostensibly maximize their own working preferences.

In the UK National Health Service (NHS) a strong tradition of self-rostering has evolved, epitomized by statements such as: "The system must produce a roster that allows individual preferences to be a primary consideration ..." ³

Currently the primary consideration of the NHS is to reduce over \$1.52B in debt and hence is set to reduce over 30,000 jobs to bring costs under control. ⁴

Even with the aid of a computer, scheduling without management skill will always fail the business.

Scheduling with management skill will succeed the business and good scheduling software will significantly increase the probability of that management success.

Scheduling software should augment management skills not replace them - anymore than spreadsheet software can replace financial skills.

View scheduling as a management skill, not a chore to be got rid off, and staff respect and commitment will

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Why We Need Flexible Working Arrangements

In the new world economy, many businesses are now global, perpetually open for business. Scheduling multiple teams of people across several operations can be daunting enough; add in flexible working arrangements and the task gets many times more complicated.

What workers, and most employers, want is balance; specifically, a work-life balance. A cynical view would say the employer wants more work, and the employee wants less work.

Simply stated it is the balance between work and life. The time one spends at work and the time spent not at work. The fact is that flexible working arrangements are something that good managers must deal with when defining their staff scheduling strategies.

The following are the main reasons why flexible working arrangements have become so popular.

Businesses are moving toward round the clock production

In recent years, there has been a veritable "explosion" in extended hours or 24 hour working as business seeks to provide their products or services in a global economy.

Even local businesses find they are part of the global distribution network. Traditional 9-5 Mon-Fri working with every weekend off is no longer the "norm" but just one arrangement out of many being worked.

Traditionally extended and 24 hour working was the working lot of the emergency services such as police, doctors, nurses and fire fighters. No longer.

Manufacturing and production lines have seen a level of automation and consumer demands that together means 24/7 production schedules or they go out of business.

Leisure and retail has not escaped and have extended hours to catch an ever increasing and mobile consumer who want services when they want and not when the supplier wants to deliver them

Legislation to Protect Workers Rights

Where longer working hours become commonplace they also become a problem. Resisting the trend put many in fear, real or imaginary, of their jobs ready to be replaced by those willing to do the hours.

This has been considered good enough reason for legislators to pen working directives and labor laws both in Europe and the USA to protect the rights of individuals to a balanced work life.

There has been a strongly growing awareness about work life balance issues. Legislation is one of the more tangible responses by Governments of the day to endorse there is life in work, and life outside of work.

Across the globe, concern has grown about employee discrimination against employees having parenting and care responsibilities. Governments' recognizing the wider social implications has also led to legislation to ensure sufficient time is granted for such employees to have additional time off without fear of losing their jobs.

However, as employers fulfill these legal requirements they also become aware of the tension of staff that are not parents and end up working more unsocial hours.



Workplace Mobility Is Not Flexible working

Increase in Part-time Working

Part-time working is on the increase. Parents who want to return to work, but not full-time. Older generation who are too young to retire, but don't need a full-time job.

This adds to the growing pool of labor that is not motivated solely by compensation or money. They want to work when they want to work.

This also includes "job sharing" where two people share one full-time job. This affects all industries, particularly where skills are in short demand and businesses need to "tap" into those skills.

Technology that enables workplace mobility

There is no doubt that technology is allowing people to be more mobile - especially to work at home.

The advantages often cited are a reduction in "dead" commuter time, work on email and telephone means business can be conducted just the same as if at a desk in the workplace, and a philosophy of "just give me a deadline and I will get it done" is the emerging work ethic.

It also allows employees with carer responsibility to still be a productive employee while arranging work around these responsibilities.

We do need to understand however that mobility is not work life balance, it is just working at a different place - it is still working. Whereas work life balance is balancing the life spent at work (even at home) with the life not spent at work.

The group most benefiting mobility working appears to be executives and senior business managers because of the increased levels of communication they can access without being tied to the office.

Flexible working arrangements are about time not location. Confusion about mobility working can actually make things worse if an employee becomes permanently connected to their "work" to be called upon at anytime at anyplace.

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How Does Staff Scheduling Software Help?

There are many definitions of scheduling but we are talking about people, not fixed machine schedules, processes, or shipping containers on a dockside.

As far as people go things are much more dynamic and complicated. There are three main types:

- Personal or time scheduling when someone schedules their own tasks to organize themselves e.g. using Microsoft Outlook.
- ❖ Task or process scheduling is when someone schedules tasks to meet the constraints of a project or job, especially if there is a particular order things have to happen i.e. Microsoft Project.
- Staff scheduling is when you identify, coordinate and deploy available staff to meet a business requirement.

Staff scheduling can be considered strategic in the sense it controls the ability of a business operation or unit to function. On the other hand personal and task scheduling organize how people go about their job but are dependent on staff availability being coordinated in the first place.

Good staff scheduling is not easy and its complexity is often underestimated – except by those that have to do it.

The more time invested in learning and using software to enhance management skills the greater the benefits and rewards.

Scheduling is complex but that doesn't mean it requires an expert. Scheduling software can be compared with accounting software. There is a level we can all operate, i.e. adding numbers to get a total or defining three shifts to cover 24 hours.

Then there is another level where we perhaps not only add numbers but apply tax calculations as percentages in our accounting software. Similarly with our scheduling software we create rotating schedules for 24/7 working making sure they all get a fair-share of days-off and weekend working.

As the manager becomes more experienced the software can be set up to monitor and track income and expenditure to display cash flows, sales forecasts and exercise credit control as a matter of routine business

Conversely with scheduling software the more experienced can design scheduling strategy for different working arrangements across groups of people, scale and automate the scheduling, monitor and track assignments and unavailability as well as generating management information about the profitability of the scheduling strategy and the well-being of the workforce.

What Does Staff Scheduling Software Do?

A great benefit of scheduling software is that the entire database of information at all levels of scheduling strategy can be shared, changed, and reviewed quickly and efficiently. This level of collaboration just isn't possible with paper and pencil or spreadsheet scheduling.

Even sophisticated schedules come down to what is essentially a relationship between three concepts viz: **numbers** of staff; their **distribution**, over **time**.

- NUMBERS includes the number of people, and/or the number of people having a particular job title. Having the right number of staff working during the day is important but on there own it is not sufficient.
- DISTRIBUTION you also need to make sure the numbers of people/skills are distributed correctly. It's no good having the correct numbers of people for the day and they are all working in the morning.
- TIME the time people are available is crucial for meeting the business requirements efficiently and effectively. Too many is as bad as too few and timing is everything.

How these factors are represented, managed and analyzed can be almost endless. If you lose sight of the fact that the purpose of staff scheduling is to meet a business requirement you can quickly run into expensive territory of diminishing returns where there is little or no benefit for the extra effort and time invested looking for a better solution.

For example delaying the implementation of a good schedule means wasting the savings that could be made immediately, and incurring additional costs while looking for other solutions that may or may not be better.

Computers Can't Do It All!

A common misconception is all you need is a computer and to just "press a button" to work it all out. Nothing could be further from the truth.

Cornell University has done some of the best research on this subject. They have found that computers are very good when the scheduling problem is well-defined. However, few scheduling problems are well defined - except for the simplest schedules. Where a value is unknown or even worse ambiguous, it takes a large amount of computer power many days to come up with a solution - or not as the case may be.

Managers on the other hand are very good at "seeing the bigger picture" and where they can "nail-down" the obvious things the rest soon follows.

Ultimately you can program a computer to schedule anything but it just takes too long. Specifying the constraint for a "correct" solution can be more difficult than finding the solution. Also the software restricts the form of the constraints. In short, specifying the constraints of the problem to be solved by the push of a button is too hard.

One thing is certain no scheduling software exists that doesn't require some kind of setup. If you make sure it doesn't need anything more than basic office suite software skills you will do well.



Some Things To Think About When Looking For A System

A system that boasts to do everything will prove not to be the case, and may be over-engineered to deliver an outcome that can be delivered at much less cost. A better approach may be to give managers the tools and workflow necessary to promote good scheduling practice and let them get on with it – after all they will know better than most what the business needs.

With the right software providing the workflow, a good understanding of scheduling soon follows. Staff numbers and how they are distributed over time is the basis of all that is required for producing good schedules. A few good rules consistently applied will usually outperform a more complex system with many rules that tries to capture everything.

The following are some items to keep in mind when thinking about how to go about defining workforce scheduling strategy:

- You need to be able to at least calculate staff by head count, job title or a combination of both, if this can include working hours and financial cost totals for the staff/job title numbers that is probably more than enough for monitoring the cost of your scheduling strategy.
- You need to be able to see how your staff are distributed over a timescale at least by headcount numbers. If you can zoom timescale information and compare distribution between sub-groups e.g. job title and/or teams this would add a further dimension how you think about your scheduling goals.
- Workflow is essential for a structured and disciplined scheduling strategy. If flexibility means doing what you do differently every time you do it then get rid of it. A principled workflow will support a structured approach that will save both time and money in the long run.

- If working and scheduling rules can be designed to automate and scale up scheduling this will be a real time saver and remove repetitive scheduling tasks. If this can be carried out without programming skills this will be a huge cost advantage in project time and consulting fees. More importantly it means it can be used by anyone with basic computer skills.
- Communicating scheduling information is as important as doing it in the first place. Publishing schedules to the web mean universal access from anywhere in the organization and email means it will get communicated more directly and faster than traditional paper systems.
- ❖ Finally scheduling activity generates a large amount of information about the function of the business. Make sure you can generate management reports that can help think about future scheduling strategy. If you can export the data in formats that can be used in other software applications that would be another bonus.

A good system will enable the conscientious manager to get involved, think further and act faster for both the benefit of the Business and the Team.



About Intellicate



Intellicate, headquartered in London, United Kingdom, is a leading provider of workforce scheduling and management software. It develops a range of workforce solutions used by companies worldwide including Schedule24 software applications. Intellicate continues to define best practices in employee scheduling for the small medium enterprise as well as the larger corporation.

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