

Isabella Longobardi

***Workforce
Planning and Scheduling***

***Automated Staff Shifts
Management and Rostering***

GogLiB ebooks

ISBN: 9788897527305

First Edition: March 2015

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BACK COVER

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Foreword

The planning of work shifts

The planning of work shifts in all organizations where there are tasks that take place on holidays, during the night or in a continuous cycle is a complex decision-making problem.

In continuous cycle activities, there are tasks that must be guaranteed every day of the week and / or on a 24-hour basis , and therefore it is necessary to assign the shifts required by the service to available operators, while respecting the constraints laid down by national legislation (like the National Labor Relations Act in the U.S.), national labour collective agreements and by company agreements.

The presence of numerous social and professional constraints is often ignored because of the complexity of the decision-making process. And this, in addition to producing an excessive and expensive usage of overtime, can also cause the decision maker to not be aware of violations of laws and contracts, thus exposing the employer to the risk of civil or criminal penalties.

In order to work effectively, anyone who has the task of planning the activities of an organization must learn to perform two tasks that are interconnected but distinct:

- First, he must learn to represent the data specific to his organization's problem in an organized manner, ideally resolving the matter manually, with pen and paper;
- Then, he must learn to use software dedicated to the problem of shift scheduling.

These two dimensions are distinct: it is useless to rush to use a software program before you have planned your organizational problem on paper , and thus before you have answered a series of typical questions:

- At what specific times do people work in my organization?
- In how many different places, or departments, do people work?
- How many different skills or qualifications are needed?
- Which and how many people are available?
- Under which contract conditions do people work?
- Which tasks, or qualifications, can people complete and provide, and in which departments?

This book teaches how to deal with the problem of allocating tasks systematically, and also teaches how to use a dedicated software program to achieve this purpose without wasting time with repetitive tasks in search of the best organizational solution, operations that can be performed by a computer.

The goal is to achieve the ability to quickly and efficiently formulate different solutions that respect the constraints of laws and contracts, to then qualitatively evaluate them and choose the most satisfying one.

Thus, in this book we will first discuss the data analysis of the problem that needs to be addressed before making use of any software tool. We will then proceed by giving examples and referring to one of the most efficient and cheap software solutions available on the market: ZonaTEAM, produced by Zonabit Sistemi.

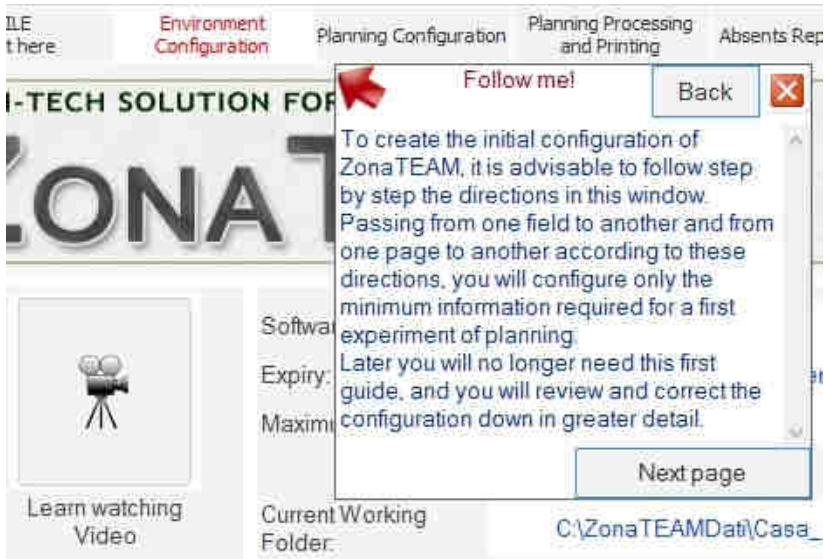
ZonaTEAM: a software for beginners and experts

ZonaTEAM[®], produced by Zonabit Sistemi Srl, is a very convenient software package for both the expert who wants to further improve his management of shifts, and the beginner who wants to become a specialist in the field of organization.

ZonaTEAM is a free download from <http://www.zonabit.it> and is structured to suit beginners: it is fully documented, and has a

virtual assistant window that, when started from scratch, shows a step by step process of what fields must be filled to create an initial configuration of the planning.

Setting up a new configuration from scratch using ZonaTEAM looks like this:



ZonaTEAM provides effective learning tools (very useful, especially instructional videos) and allows you to set up and develop small configurations without the need for any license. At the time that this book is released, you can try the ZonaTEAM software for free with a staff of up to five people. If you wish to set up ZonaTEAM with a more extensive staff, you can buy a license online for a month or a year, at the most affordable market prices.

ZonaTEAM is produced by Zonabit Sistemi Srl, Rome, Italy, and uses proprietary technology for the automatic assignment of shifts, which has proved to be extremely efficient in all

scheduling that has been programmed by consulting the authors of this book.

1. Description of the problem

In general, the problem faced by those who organize work shifts is that of making very important decisions on behalf of the employing company and for the quality of life of operators working on different tasks.

The performance of the operators is regulated by an employment contract with specific clauses, which indicate the maximum daily and weekly working hours, mandatory rests after a certain number of service hours performed, the allocation of leave and sick days, and other conditions relating to remuneration of overtime, or of work on public holidays.

The software that is used for planning must take these restrictions into account, and therefore must always provide an effectively applicable set of assigned shift, that does not violate the constraints of laws and contracts, and safeguards the general interest of the employer while increasing the quality of life of workers as much as possible.

Violations of law and contract rules can cause civil and criminal penalties; but avoiding sanctions is not the only thing at stake: a good organization, which treats staff fairly, equally sharing the less desirable work shifts without creating disparities between workers, leads to an increase in the productivity of said workers.

(... end of preview ...)

Back cover

Scheduling staff shifts is a difficult task. In organizations that work on Sundays, and/or on public holidays, and/or during night hours, scheduling shifts accurately and efficiently is a time consuming job, and it also exposes employers to the risk of excessive overtime costs and poor distribution of workload among employees.

In order to be efficient, anyone who has the task of planning the activities of an organization must learn to perform two activities that are interconnected but distinct: first, he must learn to represent the data specific to his organization's problem in an organized manner, ideally resolving the matter manually, with pen and paper; then, he must learn to use a software dedicated to the problem of shift scheduling.

This book teaches how to address the problem of allocating tasks systematically, and also teaches how to use a dedicated software program to achieve this purpose without wasting time with repetitive tasks in search of the best organizational solution, operations that can be performed by a computer.

Thus, in this book we will first discuss the data analysis of the problem that needs to be addressed before making use of any software tool. We will then proceed by giving examples and referring to one of the most efficient and cheap software solutions available on the market: ZonaTEAM, produced by Zonabit Sistemi.

Attentive readers of this book will become experts in planning, and will acquire the ability to plan with full and rational use of available human resources, saving in overtime costs, all the while providing fair treatment of employees.

Isabella Longobardi

Isabella Longobardi was born in Palermo in 1960, and lives in Rome, where she is a computer science teacher and consultant. Expert in solving organization and management optimization problems, she cooperated in the design of algorithms for the automatic scheduling of school timetables and shifts rosters. She is also web master and technical manager of the publisher *il glifo*, for which she developed many software tools for optimal generation of electronic books.