

# CASE HISTORY STR

“Case History” Anno I - TeamSystem Group



## TYPE

Building company

## CUSTOMER

Irlandini Costruzioni srl

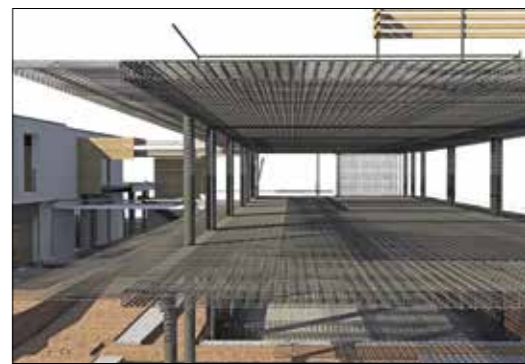
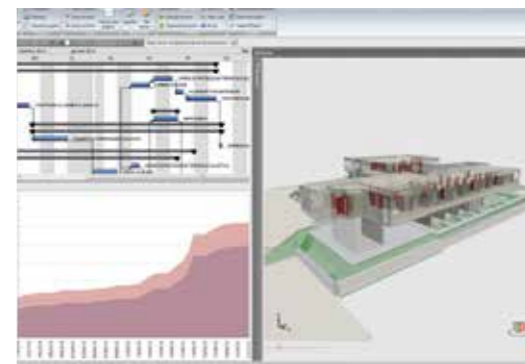
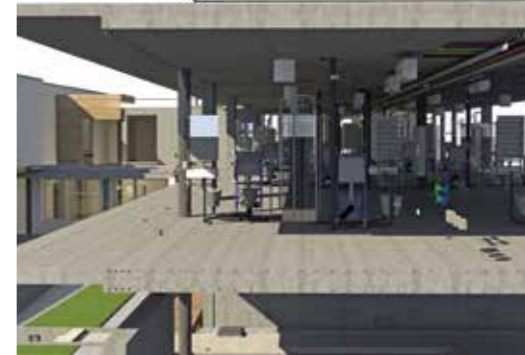
## INTERVIEWEE

Armando Casella - Architect

## SOFTWARE

STR Vision CPM

STR Vision BIM



## SPECIAL BIM

### INTRODUCTION

Any building company faces problems not easy to solve: economic needs, work schedules, difficult position where the building site is opened... When all these circumstances occur at the same time, problems increase more and more. The BIM method is an extremely efficient approach to reach the highest performance level even when conditions are so unfavourable. An example? The company Irlandini Costruzioni srl, which promoted the use of BIM in restructuring and enlarging a hotel near Verona. Let's see how BIM impacted on this operation with the staff who worked together with Mr. Michele Irlandini, Architect and Project Manager of Irlandini Costruzioni srl.

# Irlandini

## BIM improves the company

### What requirements made Irlandini company adopt the BIM approach?

The choice was made on the basis of the specific aspects of this project. The hotel owner had decided to make a remarkable investment both to restructure and enlarge the building. The project and the company were chosen on the basis of a concept proposed by Mr. Michele Irlandini. There were two crucial points to be taken into account: first of all there was a fixed budget (established on the basis of the concept) and times were extremely strict. The customer wanted the works to start after the Summer season and to finish by the end of April / beginning of May, with no exceptions. This meant just seven months and the contract provided for penalties in case of delay. In addition the restructuring works on the ground floor had to be so organized as to allow the restaurant to work even in Winter. Just a short closing period (15 days) was allowed in January.

### How did the BIM approach help the company?

The company asked us for project engineering and management. We'd never used BIM before, but we had collected information and we understood that it could offer enormous benefits. Since the first meetings, when we described the potentialities of the available tools and the workflow, we realised that we had chosen the right way.

The procedure was backwards: due to the number of requirements of this contract we had to help the company fulfil them in the best way. First of all we analysed the model supplied by Mr. Irlandini with LOD (Level Of Detail) 200, brought it to LOD 300 and synchronized it on the basis of the execution times.

Then we carried out non-detailed scenario simulations to see if macro works could be carried out in seven months, as required. After checking the feasibility of the project, both in terms of times and macro costs, we started with the actual development project.

Later we brought the project to LOD 350 and to LOD 400 for the building site drawings. As planned, the building site was opened in mid-October with remarkable advantages: for example, 3D simulations were indispensable when organising a building site layout that didn't interfere with the restaurant and its customers' safety.

### And what were the advantages during the construction?

The BIM method enabled us to achieve a high quality level under unfavourable conditions: the restaurant in activity on one side, the presence of two different building sites on the other, that is one for the restructuring works (about 500 sq.mt.) and the other one for the enlargement (about 700 sq. mt.). We have supported the company by means of tools enabling it to use the geo-referenced model directly on the building site, to better understand which works had to be carried out. This aspect was very appreciated by our customers and we were very satisfied with it. We cannot state that technology has replaced traditional tables (still asked for by all companies), but no doubt we have introduced an instrument that helps professionals read and interpret traditional drawings. Especially in case of complicated projects, it's very important to supply this kind of support and make it promptly available. For example, we make use of viewers that are easily and quickly at the professional's disposal.

### What kind of training does the user need?

No special training. Some knowledge, instead. It isn't generally known that there are intuitive instruments capable of offering so big advantages! The models can be approached easily. Changes need a separate consideration, but the display and query functions are really user-friendly. You just need an iPad or a portable PC! There are a lot of easy-to-use viewers to navigate these models and they're often free of charge!

### Would you recommend the BIM approach even for lower-value projects?

The experience made with this hotel shows that BIM is the ideal instrument for any work. The project was just over one million Euros, a much lower value than our usual projects. But even in this case, as I've just explained, there were very remarkable advantages. BIM also represents a quality improvement from the designing point of view. Companies usually supply us with 2D drawings and ask for 3D projects. With Mr. Michele Irlandini this step was totally omitted: he gave us a model and we started working on it, that is from an upper level (even as for attitude). In this way we could comply with times and costs and achieve a high quality result, which is of top importance.

### What's STR role in this process?

In the BIM processes we use STR software to process 4D (times) and 5D (costs) steps. Our choice is based not only on STR experience in the software for building and design companies, but especially on the IFC engine inside the software: this offers maximum interoperability and perfectly matches the OpenBIM philosophy that we adopted since the beginning. At present STR Vision CPM is the best software on the Italian market to integrate 4D and 5D within a BIM process. We've tested it both with small and bigger models and we are very happy.



### INFO

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## TYPE

Building company

## CUSTOMER

PIZZAROTTI & C. SPA

## INTERVIEWEE

Claudio Tenna,  
Group Controller -  
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NEW

# PIZZAROTTI

## Management control on a global scale

### INTRODUCTION

Impresa Pizzarotti & C. S.p.A., founded in 1910 by Gino Pizzarotti as a personal business, was transformed into a company with liability limited by quotas (Srl) in 1945 by Pietro Pizzarotti, the father of the current Chairman, Paolo Pizzarotti. The Company became an SpA (liability limited by shares) in 1961 and now has a share capital of Euro 250 million.

Steady progress was made over the years and, since the late 1950s, Impresa Pizzarotti & C. has consolidated its presence in the construction sector with the performance of major public and infrastructure works for State bodies and leading Italian private companies. Commitment and the ability to execute major projects have also enabled the Company to establish a successful presence abroad, with operations in various countries for many years.

The Company has always sought to grow steadily by carrying out civil works in such areas as thermoelectric and nuclear power stations, road and motorway infrastructure, civil and military airports, irrigation works and waterways, dams, industrial infrastructure, railway construction and prison buildings. The Pizzarotti Group is based in Parma, its traditional headquarters, and operates via many companies that work together to maximise their synergies in the fields of infrastructure, the environment, water supply, civil and military airports, construction and property management.

### FOR PICTURES AND APPROVAL

Ing. Claudio Tenna  
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**Your relations with STR have developed over several years, in two phases. The evolution of this project is worth summarising.**

Relations between Impresa Pizzarotti and STR commenced in the early 2000s in the context of preparing international tenders. At that time, the Company had decided to build on its experience in the domestic market and a number of European countries by expanding its presence abroad. This resulted in a need for a tool for the preparation of tenders. PV2 was adopted and the collaboration began.

The first phase commenced in 2007, when I was asked to take responsibility for management control at Group level. I realised that we needed a new system to support the various contracts obtained, often together with partners and with activities in non-European countries. Our contract management software, developed and used internally for control purposes, was not designed to address these needs. So I decided to adopt STR Vision CPM.

The second phase began just a few years ago, with the reorganisation of the contract management department and the standardisation of the tools used.

**What were your requirements for the first phase implementation of the contract management system?**

Essentially, we needed to cover all situations that the internal application was unable to address, such as contracts with external administration, or even internal administration using software different to that adopted in Italy, and contracts not denominated in euro.

**What were the reasons behind your decision to adopt STR Vision CPM?**

Firstly the ability to meet the needs just described; in other words, the ability of STR Vision CPM to capture accounting data from any system, in any currency, recorded using any chart of accounts, whether internal or external.

When I realised the potential for STR Vision CPM to manage our work site activities, which relied on simple spreadsheets at the time, I was convinced and chose it. I refer in particular to the preparation of contract budgets, their time allocation over the work schedule and the related accounting for revenues and expenditures.

**In the second phase, the system has recently become "centralised": what were the requirements in this case?**

Principally the need to rationalise the licences and standardise the templates developed. During the first phase, there was a proliferation of stand-alone licences that were difficult to keep updated with the latest releases, with templates and reports that differed from country to country.

In the second phase, the licences were centralised on the HQ server, thus limiting the number necessary and benefiting a larger number of users. Today, the same licence can be used on the same day for 8 hours by the controller in Moscow and for another 8 hours by a colleague in Lima or New York.

Additionally, the templates defined centrally by the HQ team are common to all 15 countries in which the contract management system is used.

**How did STR help you in this second, more complex phase?**

STR gave us advice on the definition and set-up of templates and on the training provided to the young new controllers who join the Company every year.

**What challenges did you overcome when moving from a system "spread" among the work sites to a true "centralised" system?**

The greatest difficulties were encountered at the start of the first phase, rather than during the second. As with all processes of innovation, there is always some resistance to change. In addition, implementing STR Vision CPM on a contract requires a non-trivial initial investment of time and resources, which did not help. Everything was much easier later, after the first results became evident. In the second phase, with the "train steaming along", it would have been more complicated to stop it than to let it accelerate more.

**Was the ability to work on the network important not only for contract management purposes, but also for the internal organisation of the Group and operational processes among the various business areas?**

Yes. As I mentioned, the second phase involved the reorganisation of our contract management department, with centralisation of the software used as an integral part of that process. We moved from a small group based in Parma that processed the data received from our work sites and sent them the resulting control reports, to the current situation in which 23 controllers distributed among 15 countries report functionally to the headquarters, preparing budgets for the contracts where they are located, applying the Earned Value technique to control them and analysing the variances that arise. In short, they are autonomous when it comes to contract management.

**What technological and operational aspects of STR Vision CPM do you see as fundamental for the purposes you have described?**

Certain modules of STR Vision CPM, such as budgeting, estimating, work and time scheduling, work site accounting, Pi.Co. are essential to the work of our controllers. Others, such as the accounting for revenues and expenditures - for which my department is not responsible - are tools that the work sites can use, if allowed by the contractual conditions agreed with customers and the project manager decides to use them.

The multi-lingual and multi-currency characteristics of the software are just as important: these modules are indispensable for all contracts outside of Italy that not denominated in euro.

**How have these characteristics translated into advantages and improvements in the management of your activities?**

Today we have a tool that enables us to make accurate economic and financial forecasts, configure them based on the execution strategies decided by the project managers, compare budget revisions, calculate the requirements for individual resources, price quantities in terms of costs and revenues and allocate them dynamically over time, interfacing the budget with the work schedule etc. All this while saving time and resources, maintaining the traceability of data and the precision of calculations. All, as we say, "with a light touch on the pedal"!

**In your view, which characteristics are most useful for your control activities?**

Without doubt the ability of the software to apply the Earned Value technique.

**How important was the know-how of STR in the Construction sector when selecting the system?**

Very, indeed fundamental I would say. In my opinion, knowledge of the Construction sector has enabled STR to approach matters in a way that meets work site needs and, therefore, in a very concrete manner. Also, I have always appreciated the intellectual honesty with which our suggestions for improving the system have been met over the years. In general, I believe that our collaboration has been and continues to be mutually beneficial.

**After having implemented the "centralised" management system for a number of months, what principal advantages/benefits - operational, economic, other - have been obtained in your view?**

I have already mentioned some, like the optimisation of licences and the standardisation of templates. I would also add the interchangeability of our controllers, who now all work using the same logic and the same tools. This limits handovers between them to the specifics of the contract concerned. We are not yet fully up to speed, but we are working on it.



## TYPE

Building company

## CUSTOMER

PAC S.p.A.

## INTERVIEWEE

Stefano Malgarida, IT Manager,  
David Battiato, Project Manager  
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NEW

# PAC SPA

## Integrating 4D and 5D in a BIM project

### INTRODUCTION

As a virtuous example of a construction firm that strives constantly for technological innovation and the implementation of tools for the automation of operational processes, PAC S.p.A. has worked on infrastructure projects with a high level of engineering content since the 1960s, constructing roads, tunnels and civil-industrial buildings, mainly for public-sector principals. In recent years, the design and construction of hydroelectric power plant has played a particularly important role in the business. The execution of complex projects that require numerous processes for the management of a contract pushed PAC to implement the BIM methodology some years ago, as this tool is extremely effective for reaching maximum operating levels. This explains the interest in STR software solutions capable of optimising the operational performance of the Company, according to Stefano Malgarida, IT Manager, and David Battiato, Project Manager Assistant, at PAC.

### FOR PICTURES AND APPROVAL

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### What pushed you to implement the STR software?

During the technological development of the Company we realised the absolute need for tools that would help us to manage the various operational phases in the execution of a contract. Our commitment to the BIM methodology has of course involved making a number of major IT investments. Investments in products capable of achieving key objectives, such as speed and precision in the performance of architectural design work, and precision and reliability when preparing quotations and scheduling. Accordingly, after having implemented our 3D design programmes, we wanted to integrate them with interoperable quantity calculation software to facilitate a more linear approach to our work. We knew about STR software from our University days and admired its ease of use and excellent functionality so, when we had the chance to integrate it with our processes, we did not hesitate. By contrast with other quantity calculation software, STR is especially good at facilitating collaborative rather than individual work. Considering the steady growth of the Company, we believe this aspect to be absolutely fundamental.

### Which STR functions do you use and how important is process information for a company like PAC?

It is increasingly important for the management of work sites to have access to the quantity calculation database, find the necessary data and group the information in an easy and intuitive manner. This is especially true when it comes to complex work sites subdivided into multiple phases, each with various activities and processes to follow and several subcontractors. Drawing on the new data transmission technologies and new connectivity, we can use the STR software remotely to see the quantities calculated at any time and prepare work site budgets and reports. Furthermore, the integration of this software with the design programmes prepares us - especially in BIM terms - for the management of tenders and contracts, which increasingly require construction companies to possess the technology and software needed for interoperability in the various phases of a project.

### The new "BIM Decree" gradually introduces the requirement into tenders for public contracts; how are you organising yourselves in this regard?

In accordance with the new decree and the established time scales, the executive design will be delivered to firms using the BIM methodology. So we are working to recreate small parts of the contract and account for the works using the tools available to us. Looking ahead, we realise that it will become increasingly necessary to create a system that transforms the BIM models envisaged by the designer into information of more practical use to the Company. The two aspects rarely coincide: the person who builds a model for a project does not usually think about the construction phases. This means that the model has to be revised radically to make it useful in the execution stages.

### Based on your experience, how can STR solutions help a firm preparing to tackle complex infrastructure projects?

We found considerable advantages when using the STR software on our latest projects. We worked in Val d'Ultimo, in the Municipality of San Pancrazio (Bolzano), on the construction of the "Koff" tunnel (length 994.65 m) and on the construction of the Pizzighettone hydroelectric plant (Cremona) for Edison. This last project, in particular, had particularly complex shapes and it was therefore necessary to use BIM methodology to make the best possible estimate of the quantities involved and the work necessary, as well as to manage the quantity calculations effectively. The use of STR Vision CPM enabled us to integrate 4D (times) and 5D (costs) within the process due, in part, to implementation of the IFC engine within the software; this assures maximum interoperability from an OpenBIM standpoint. For us, at the moment, STR Vision CPM is the best software on the market for the integration of 4D and 5D within a BIM process.

### So STR Vision CPM will be used on future projects...

Certainly, and we will be able to examine further the potential of STR software on two new contracts: one in Italy, being the final phase of the Bressanone ring road (central exit), which has just started; the other abroad, being a hydroelectric power station in Uganda, where we will be able to use the multilingual version - a characteristic of the STR Vision CPM software that is very useful in such cases.

### Are you satisfied with your choice?

We are very satisfied indeed. The persons who use the software every day have all given exclusively positive feedback. This partly reflects the excellent support received from STR during the implementation phase. In addition to the quality of the software, which we have already highlighted, STR also adds value by making its personnel and technical support available at any time to resolve our problems as they arise.



## TYPE

Engineering company

## CUSTOMER

D. Vision Architecture Srl

## INTERVIEWEE

Armando Casella - Architect

## SOFTWARE

STR Vision CPM



SPECIAL BIM

## INTRODUCTION

D. Vision Architecture is an architectural company founded in April 2015 by six architects with a long international experience in the field of architectural and engineering, made at Silvano Buzzi & associati in Brescia. They believe in team work and highly specialised information sharing; they are participating in several initiatives making use of BIM not only at design stage but also to define the work life. Together with other professionals, the company has won a large number of tenders of different type and size: the requalification of the Hospital in Sassari, the project for a Primary School in Milan, the extension of the Politecnico in Turin and some design tenders such as the Tolerance Pavilion in Moscow. BIM procedures have been implemented inside the company procedure's protocol and today they are a distinguishing feature of the services supplied. For this reason D. Vision Architecture has created "BIM FACTORY", a brand supplying BIM services to all players in the building chain: contracting authorities, professionals, companies and maintenance technicians.

## INFO

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Armando Casella - Architect  
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# D. Vision Architecture BIM is the future

### What are the linchpins of the company's growth?

In every project we carry out a progressive formal and technological research to improve the quality of construction and of life. In addition, thanks to the steady innovation of our management processes, we have completely changed our approach to the project and our company is acquiring a prominent profile in the design and building site management scene, both in Italy and abroad.

### How did you get to the foreign market?

I've been working as Manager of the Architectural Department of Silvano Buzzi & associati for twelve years (2003 - 2015): I planned and looked for solutions to better manage and to deal with the effects of the crisis which affects the building sector since 2009. I initiated an internationalization process of the company, which involved investments both at financial and professional levels. I started with a first experience in the U.A.E.: I established a company in Abu Dhabi and since then I've been in touch with a lot of different realities, very far from those we had known before. This personal experience is an important basis for D. Vision Architecture in approaching the international market today.

### What are the most important aspects of this experience?

First of all we don't compete with the major international companies capable of supplying turnkey projects which include design, project management, jobs direction, etc. We are mainly focused on the Italian companies abroad and offer them our innovative services relying on our common culture: this is still a trump card. Another important aspect is our decision not to transfer our operative work abroad. We work in Italy with Italian engineers and architects: an additional feature increasing the value of our design and management quality.

### Your first important project?

We were charged by Silvano Buzzi & associati with the roofing of the "Grand Egyptian Museum", the new archaeological museum in Cairo. A huge project: a roof of 130.000 sq.mt., consisting of about 50.000 panels in stretched variable-geometry net, 332 km of aluminium profiles, as well as a steel support structure. This was the first project where we applied the BIM process from the very beginning. Our whole experience on the matter has started with the Cairo project.

### You were certainly the first ones in the field! How and when did your interest in BIM start?

My interest in BIM dates back to many years ago. I appreciated its huge innovative potential at once, so we invested consequently both in terms of computer equipment technology and staff training.

### You're pioneers...

Yes, we are, because we have been interested in this subject for years. We believe that research and technology also involve testing how a process is put into practice. This idea is producing positive results in terms of activities: the market of services related to the BIM process is growing exponentially, requests for offers and projects are strongly increasing, and not only for big projects. These could be important news for the Italian market: even medium-sized or small/medium-sized companies are approaching the BIM method, they're enquiring about its advantages and the impact it could have on their internal production cycle.

### Is it easy to explain what BIM is?

Not at all! Not only it's difficult with the players in the building chain, but also with designers, who are still rather behind on the subject. It's useful to explain what BIM is, but every effort should be made to explain what it ISN'T. Clarity is indispensable.

### What about designers?

There's a lot to do, because most of them are still using traditional methods. Many designers think that BIM is "only" a 3D model, but it isn't: a 3D model was already used 15-20 year ago. Then data were added and a parametric model was reached. The following step was using the model to check costs, manage variations, planning, execution stages, maintenance, etc. This is BIM.



### Does BIM offer so many advantages?

Yes, certainly. They can be appreciated by all players in the building chain. The problem is explaining how the process is advantageous in terms of quality, efficiency and cost-effectiveness. An example: we've recently had an experience with a small company, dealing with a turnkey project. They had to build a hotel in a short time and with a very limited budget. After experiencing the benefits of the BIM process in developing the project and managing the building site, they decided to use it for all their building sites.

### Are BIM services the market of the future?

Yes, absolutely. It's the future, no doubt. We've invested a lot, and now we're starting reaping the benefits of our job.

### What's STR role in this process?

Of course our job with BIM has required some important investments in IT technology. Their extent depended on the significance of the targets we wanted to reach, such as speed and precision in architectural modelling, reliability of estimates and planning. In both cases we wanted the most performing product on the market; as for the second aspect, we identified STR Vision CPM software (we didn't know it at the time) to start our 4D (times) and 5D (costs) testing. We found it, studied it, chose it. It was the start of an experience which has gone beyond a simple customer/supplier relationship.

### What feature was crucial for your choice?

The implementation of the IFC engine in the software was the decisive factor which made us choose STR Vision CPM, and I'm sure it will be the same with many other customers.

### What role does the IFC standard play in the BIM process?

It depends on the "philosophical" approach to the process. We've adopted the OpenBIM philosophy, that is BIM is "horizontal", not "vertical", it must be able to "open" to other software products and systems. This implies the magic word "interoperability" and its language is only one: IFC.

### Give a comment on how STR Vision CPM operates

Very easily: at present STR Vision CPM is the best software on the Italian market to integrate 4D and 5D within a BIM process. We've tested it both with small and with bigger models and we are very happy.

## TYPE

Technical Office

## CUSTOMER

Andrea Donadello - Architect

## INTERVIEWEE

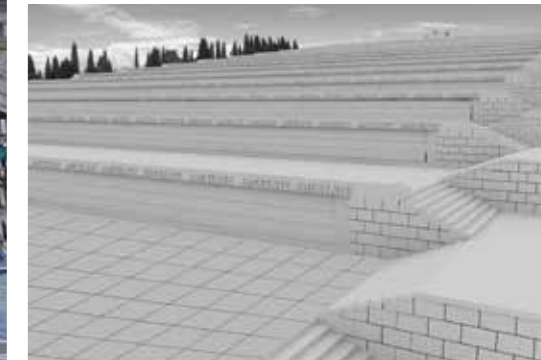
Andrea Donadello - Architect

## SOFTWARE

STR Vision CPM

STR Vision BIM

## SPECIAL BIM



## INTRODUCTION

Andrea Piero Donadello is a self-employed architect who mainly deals with restoration projects. He collaborates with the "Palladio Associati" office carrying out surveys with laser scanner technology, and with "CSG Palladio", a laboratory responsible for diagnosing infrastructures and Cultural Heritage. Mr. Donadello's past activities include the restoration of the Palladian Basilica in Vicenza (Italy), which was awarded the "European Prize for cultural heritage by Europa Nostra Awards 2014", the analysis of the Fabrica as part of the restoration project of Rialto Bridge in Venice (Italy), and the recent restoration project of the Military Memorial in Redipuglia (Italy).

# Donadello

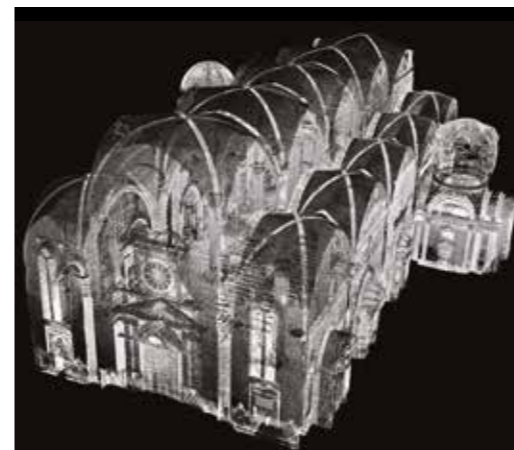
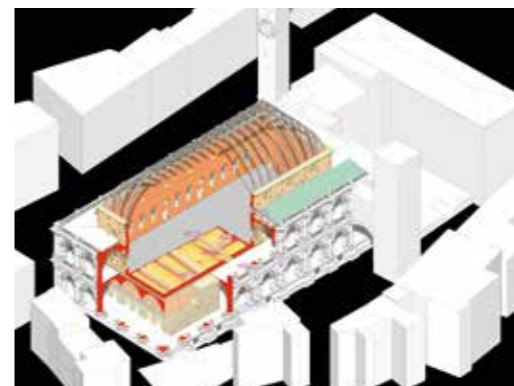
## Restoring in BIM logic

### How did you get to know STR solutions and how did you start with BIM methodology?

The restoration of the Military Memorial in Redipuglia, carried out together with my colleague Mr. Eugenio Vassallo, was the first important requalification intervention on a historical-monumental building using STR Vision software and the BIM (Building Information Modelling) method. This method is based on a principle: restoring involves "going back" over the work project to find its logic, its construction choices and its individual elements. It's a sort of "virtual disassembly" where the 3D model, complete with all necessary information, represents both the starting point and the synthesis of the restoration. This is why tools capable of describing and structuring the building elements are so important: their 3D representations are used by all professionals involved in the intervention, from structural to service engineers, considering all aspects connected with calculations, accounting and economic management of the whole work. Since the beginning I realized that STR solutions could perfectly meet my requirements, because they have been developed keeping the management of the whole building process in mind.

### What challenges did you face during this important intervention?

From the functional point of view, the main challenges were related to the deterioration of the building: it was built in the middle of the thirties - with some degree of care and precision - and it bore the signs of time. The Military Memorial didn't show any special structural problems, a part from negligible deformations caused by a limited subsidence of the soil. Greater attention was required by the material preservation plans, especially as for the bronze plates in the chapels where the soldiers' remains are kept. The real challenge was time: the Memorial will be opened in 2018, the centenary of the end of World War I, and the works are planned to stop in 2017. To keep to this stringent schedule we adopted a clear strategy: each construction element playing a function in the work was identified and associated with an estimate item concerning the works to be carried out and the execution time. This procedure was possible thanks to STR BIM solutions.



### On the basis of the experience made in the requalification of the Military Memorial in Redipuglia, what is, in your opinion, the potential of the BIM method in the field of monument restoration?

No doubt a very remarkable one, because the method is based on the overall management of the building process (a crucial issue today), where the accurate monitoring of execution procedures, times and costs plays a fundamental role. Even more so in monument restoration, where variables and unexpected events are more frequent than in a common building site. Due to its nature, any historical building shows an "unpredictability rate" which requires an even more accurate 3D modelling to provide a realistic picture of deformations, cracking situations and hidden portions. In this framework the so-called "scan to BIM", i.e. the integration between 3D laser scan technology and data into a BIM model, is the most effective way to obtain a true picture of the actual status of the building: a fundamental condition to choose the correct intervention method as well as the best procedure to monitor works, times and execution costs.

### Do you think that STR solutions offer an efficient answer even when managing maintenance operations over time?

Certainly. In addition to the advantages underlined above, I think that STR Vision is an extraordinary tool to support later maintenance operations. Scheduled maintenance has been a topic of discussion for many years, at first at academic, later at regulatory level. Finally maintenance plans have become mandatory by law. However, maintenance plans mainly consist of a number of prescriptions which hardly apply to the individual maintenance object. BIM tools, developed by STR, offer a true qualitative leap because they go into the details of each individual component and of the works it requires, giving a clear indication of times and costs.

## INFO

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## TYPE

Technical Office

## CUSTOMER

Pro Iter

## INTERVIEWEE

Roberto Vacchelli,  
Manager and Coordinator  
of Pro Iter s.r.l.'s technical-  
economic analysis sector



NEW

# Pro Iter

## Work order management in the Cloud era

### INTRODUCTION

An ongoing effort focused on training and career guidance, together with a continuous development of technologies and IT innovations has led Pro Iter srl, an engineering company founded in Milan in 1998, to grow over the years representing one of the most qualified enterprises in the development of territorial planning projects, specialising in the field of geotechnics and underground engineering. The need to manage a significant number of projects and large construction sites makes the management and accounting projects particularly complex. To address this need, as Roberto Vacchelli, manager and coordinator of the technical-economic analysis sector explains, Pro Iter has been working with STR software solutions since the company's early days.

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#### How has Pro Iter evolved over the years from a technological and application point of view?

Over the years we have stayed on top of the various updates of the many software components we use within our company so as to be able to manage each and every work order more accurately, a complexity which requires an information system organised to handle the variety of projects we manage simultaneously. Within this context, the function covered by management software is essential.

#### What are the specific elements that drove you to adopt the STR solutions?

We have a long-standing relationship with STR which began with the old Linea 32 management software. When it was time to evaluate the implementation of new, more innovative and better performing tools, we naturally focused our attention on the evolution of the same product and therefore on selecting the STR Vision CPM solution. This tool allows us to have the required data quickly and with the necessary economic analysis precision for each single work order, both in terms of cost estimation and analysis, as well as a comparison of the estimates vs. final costs.

#### When you began the transition to the new Vision platform, what were the internal needs which you were able to address using the products available as part of the platform?

With the growth and development of new work orders we realised that we needed to implement new technologies. Our full confidence and trust in STR was driven by the full satisfaction we had experienced up to that point with the Linea 32 product. Then when we worked on the job relating to the new Brenner railway tunnel, carried out in collaboration with three companies (one from Italian-speaking Switzerland, one from German-speaking Switzerland and one based in Bolzano) we decided to opt for a web cloud-based work order management solution, purchasing the required STR Vision CPM licenses. In this case, a fundamental aspect was the possibility of implementing the multilingual module which facilitated the fruitful collaboration of the various companies involved.

#### What specific functionality is particularly beneficial?

First of all, the management of work orders in each operational phase, from the estimates to the final costs. The ability to model the structure of the estimates to our liking, together with the ability



to connect a series of project documents in a single database is very important for us. Above all, for a company such as ours, which works with many different clients, having a tool that allows you to develop the structure of the estimates, adapting it to different needs is critical. The level of subdivision into aggregators, which is unlimited, also makes it possible to automate and therefore optimise the processes involved. The structure of the reports is also particularly relevant. The software includes a complete range of functionality facilitating a detailed customisation, both in report as well as printed format, allowing you to quickly produce and obtain any kind of document and information.

#### What is your level of satisfaction with the STR solutions?

Certainly very high. First of all, the range and versatility of the functions and tools implemented in the software has guaranteed a perfect fit with our business needs, which involve the management of a large number of projects with different players and a complex accounting process.

#### How is Pro Iter moving as regards to the BIM world? To what extent can a tool like STR Vision CPM help with the development of projects in BIM logic?

We have been analysing different strategies for implementing BIM processes for a few years now, above all focusing on how to invest in technological and professional resources regarding BIM modelling and design. We are still at a preliminary stage, but with STR's collaboration, just in this last period we met with a consultant (BIM Factory) to get a clear understanding of the opportunities we have in this direction and the possible developments on our daily work.

#### Which particularly significant work orders or projects are you currently working on?

We are managing the design and works supervision for the new marina in Ventimiglia, a project that involves the consolidation of the eastern slope, the creation of commercial spaces and services on the port platform, the construction of internal port roads and public / private parking structures located in the areas behind the port. In addition, this year, in collaboration with ANAS, we were awarded the tender for infrastructure projects in the Italian territory and in particular in Sicily and Sardinia.

The information contained in this document are correct at the date of publication; however, they are subject to change over time. TEAMSYSTEM S.p.A. apologizes in advance for any inaccuracies and / or errors.