

# CASTELLI DIARIES AND NOTEBOOKS: DELIVERED JUST-IN-TIME!

## CASTELLI



*"Our process has required a long term commitment both in time and money. There are rewards to be enjoyed along the way but the real reward at the end of the process is the improvement of many aspects of our business."*

Mark Poland,  
Managing Director  
Castelli UK



*"This case study demonstrates that 4D can be used to develop systems that, in the past, required a large project team, a mainframe computer and a multi million pound budget."*

Ed Coxon  
Software Developer  
Advanced Technology Integration

20,000 orders each year

5,000 stock products each year

1,5 million individual branding personalisations performed



Paros notebook from "Ivory" collection

## MORE GROWTH, MORE COMPLEXITY

Castelli's business in the paper notebook and diary sector has increased and is still increasing both in terms of volume and diversity. As growth continues due to the popularity of Castelli's products and services, the complexity of the business is increasing.

*"Our increasing complexity challenge was further complicated by the need to control more of the processes in house,"* Mark Poland says.

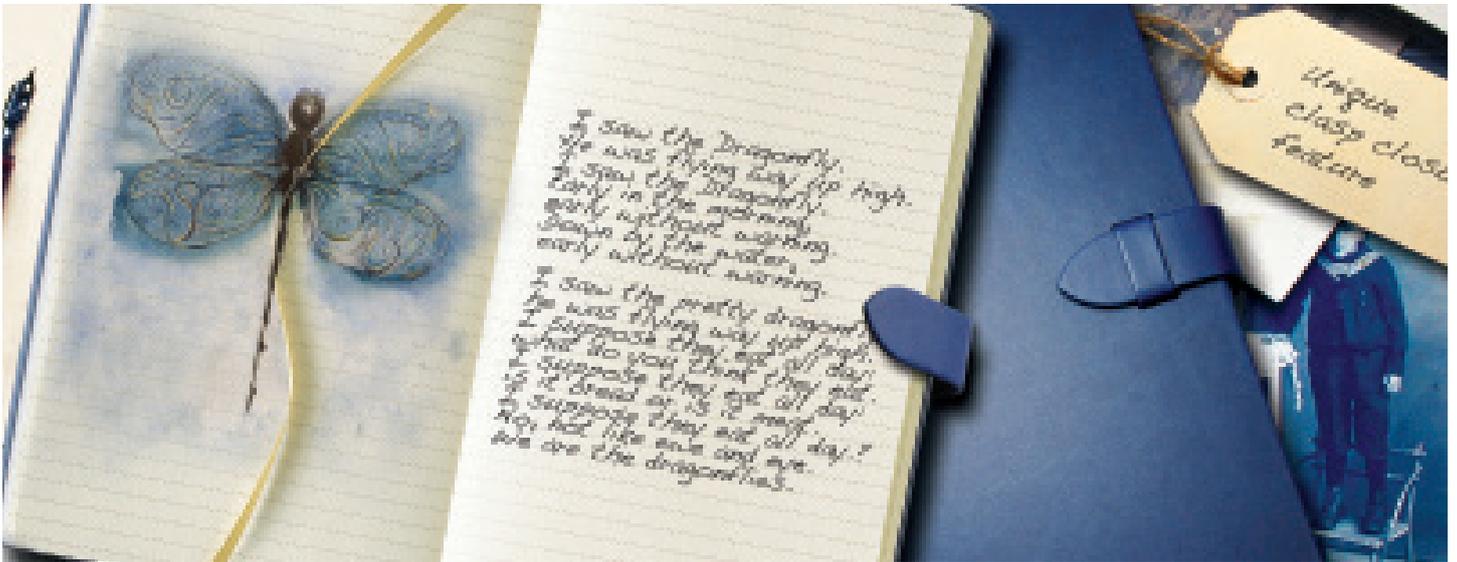
Castelli has very high service targets and the system in place at that time was not able to effectively support both the onward increasing complexity and diversity of activities (with sometimes 55 personalised editions of the diary), whilst maintaining absolute command and control. So Castelli decided to undertake a management planning review of the systems. The aim was to provide and implement a systems

solution that would avoid potential future service problems.

## MALADAPTIVE ACTIVITIES TO RESOLVE

The challenges were to invest time in systems development whilst managing a very active on-going business. This took immense effort and planning. However the consequences of not giving every last ounce of effort into this project and managing the daily business concurrently may have resulted in the tarnishing of the Castelli brand.

*"We were also aware through our review and planning processes that we were going to confront and resolve historic structural and operational maladaptive practices. These changes were made based on real time data analysis and ran concurrently alongside system development"* explains Mark.



Mirabeau notebook from "Ivory" collection

## ABSOLUTE COMMAND AND CONTROL

The Castelli customer offering relates to producing beautiful Italian design paper notebooks and diaries. Its flair and passion for products requires a supportive operational environment in which creativity can flourish.

*"Protecting this supportive operational environment is the key to our success. Success founded on maintaining competitive pricing, providing rapid lead times, ensuring order transparency to customers and using flexible solutions in our problem solving. So the objective was to have absolute command and control of our operational environment in the pursuit of providing an improved sales offering to our customers",* details Mark.

Below are Castelli's operational objectives:

- Handle the volume of business: currently in the UK, Castelli handles nearly 20,000 orders each year for 5,000 stock products.
- Improve customer service by reducing the number of errors and delivering products on time.
- Spread the workload by re-distributing work in the busy period, September to December, and moving it to the quieter, earlier part of the year.
- Support all aspects of the company operation in one integrated database solution where possible to automate current manual tasks.
- Menu-driven order processing that presents only valid options for selection to the user.

## A 4D-BASED SOLUTION

In 2004 4D was chosen as the development environment to replace the existing system. *"We chose 4D because, as a database, it provides facilities that the package did not",* says Mark. *"Having a programming language where the former system only had scripting, meant that we required systems transactions, journaling, backup, recovery, etc., which are facilities found on mainframe systems, making the Castelli system a more 'industrial strength' solution. Another advantage is that an integrated database covers the activity at business line level, whereas separate, discrete systems providing business coverage at the function level would often require data to be re-entered or interfaces to be created."*

The 4D system deployed by Ed Coxon, Advanced Technology Integration, provided Castelli management the awareness and opportunity to decide to do things differently. Today the Castelli system is currently in the process of being converted from 4D v11 to 4D v13.

Objectives for upgrading to v13 are for better Web Area support and enhanced Listbox functionality. Motivation is to use a supported version of 4D. The delay is because of lack of support for PowerPc processors, of which there are several in current use.

## ORDER PROCESSING

### Margin calculation

The customer orders are costed and the list price is calculated for that customer, which produces a list margin comparable to the actual margin in order to rate its profitability. These ratings require different levels of authorisation and follow the order through to production and dispatch.

### Credit checking

Credit checking is done from account balances and credit limits, supplied by an interface to the accounts system as well as the orders currently in the system. The system checks that the order is in line with the specification and ensures all information is available to complete the order.

### Workflow

Orders are acknowledged from the system by e-mail containing a special URL which allows the customer to confirm the order online with a web browser. It then proceeds to production automatically. The order generates a workflow containing those required operations.

## PRODUCTION AND LOGISTICS

### Planning

Planning delivers a project chart for the order taking into account operation dependency, factory lead time, stock availability, supplier lead times and department capacity. In this way orders can be scheduled by the system for a specified delivery date or earliest available date using critical path analysis within the plan.

## Approving artwork

Online customer actions are mainly to approve artwork (corporate logo to identify a diary for example). A similar mechanism is used for clients to access the latest artwork online. They can 'fail' the artwork, which automatically generates new actions for the Art Studio. Likewise, 'approving' the artwork will launch actions that include e-mailing orders to suppliers and releasing jobs for the factory. When all approvals are complete, the order is scheduled and the customer notified of the delivery date.

## Control

The system controls these operations across all departments and only releases operations in the right sequence and when stock is available.

Production documents are printed as required with custom tooling kept in central store controlled by the system. This eliminates the need for a factory job bag and reduces errors when specifications are changed at the last minute.

## Factory operations

Operations are picked from the warehouse and delivered to the required workstation for completion. This is updated in real time on to the system so that department loads in the factory can be seen at a glance along with in-hand time, daily load and backlog.

## Dispatching

Orders are dispatched, taking into account transit time and the scheduled delivery date. The system interfaces with the carrier's own dispatch system and receives a tracking code that is sent to the customer with the expected delivery date. After dispatch the order is invoiced and a record sent to the Sage accounts system.

The system manages import and fulfilment of orders from the web site.

# ACTING IN A FLUID AND SUCCINCT WAY

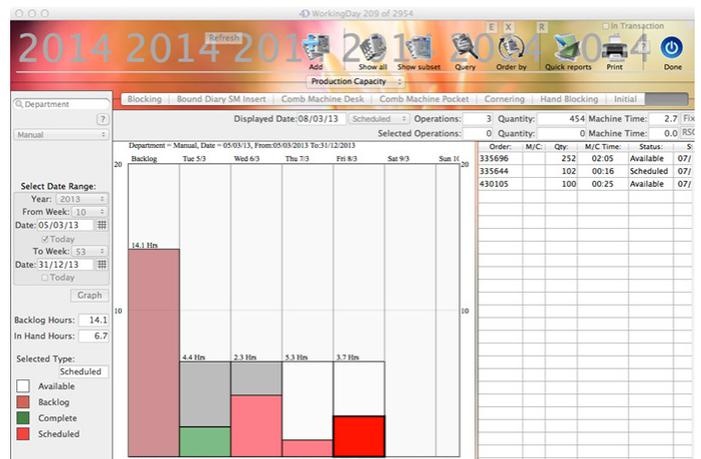
*"It should be noted that thanks to everyone's ingenuity and effort within the Castelli team we have achieved a fantastic systems product", declares Mark. "The result is that the system now provides a more sustainable and supportive environment enabling everyone to focus on the delivery of market leading paper notebooks and diaries to our valued customers. Positive control and information provided by our system helps us act in a fluid and succinct way".*

To illustrate, here are just some of the improvements:

Improved customer service by better handling of the peak season load with increased accuracy of specification and timely delivery. This provides an edge over the other diary and paper notebook manufacturers by guaranteeing very short delivery lead times to a specified day, rather than the industry standard lead time of 2-6 weeks where delivery is specified to a particular week. Even during the 4-6 week maximum demand period, Castelli still achieves a 98.5% delivery record for all orders dispatched on schedule. With the remainder being dispatched 24 hours later. Castelli's performance outside of the peak demand period is even more impressive, with 100% of orders completed ahead of their ground breaking lead times. More efficient customer credit checking ensures that credit is available before stock is customised to fulfill the order.

## System highlights

- Menu-driven order specification
- Authorisation system to ensure profitability
- Customer credit checking
- Automatic generation of workflow
- Automatic scheduling and monitoring of late orders (slippage)
- Stock control and management
- Online customer confirmation and approvals
- Document management with audit trail
- Warehouse management and picking
- Management reporting of sales and margins



Reduced administration costs by automating many functions previously done manually, for example, pricing, costing, order validation, supplier ordering.

Reduced staff training by having a menu-driven order specification reducing the need for staff to learn which option combinations are valid for the product.

Improved profitability of orders by ensuring that they are properly "costed" prior to authorisation.

Managed work-flow has secured a "calm factory" – the seasonal nature of the diary business concentrates a lot of effort into the latter part of the year. The list of jobs with a scheduled completion date giving management confidence about meeting their deadlines.

Capacity scheduling gives management advanced notice of factory load, allowing seasonal staff to be recruited with spare capacity identified and allowance for fast-track orders incorporated.

Better organisation of Art Room operations that now have a clear list of job requirements as well as records of progress. It also has an ability to receive art-work approval on-line (even from customer's direct) and to receive orders from suppliers, schedule amendment and alterations.

## THE MAIN COMPETITIVE ADVANTAGE

"Our 4D system provides the creative and hardworking people of Castelli, with that necessary supportive operational environment they require. The result is that we continue to maintain our competitive advantage in terms of price, in our dexterity to meet customer demands, in our product's availability, in our ability to consistently provide precise and rapid lead times whilst providing a caring, transparent and informative customer service", Mark concludes.

## ABOUT CASTELLI UK

Castelli UK is a subsidiary of the Italian company Castelli, a stationery designer and producer which provides customised promotional goods to the corporate and retail market. The company has the most exclusive handpicked desirable, Italian made designs in the market place. It specialises in retail styled notebooks, corporate notebooks, promotional & corporate diaries and journals, and company promotional products to suit all requirements.

Currently in the UK, Castelli handles nearly 20,000 orders each year for 5,000 stock products.

Those stock orders required 1.5million individual branding personalisations to be performed.

Mark Poland

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## ABOUT ADVANCED TECHNOLOGY INTEGRATION

Advanced Technology Integration known as ATI was formed in 1994 by Ed Coxon, a highly experienced independent software developer, specialised in business information systems (databases) for small to medium size businesses, and deployed using 4D.

Software systems can be tailor-made to a customer's detailed business requirements, integrating with web, e-mail and accounting systems so that the resulting system is a true business fit.

Both options can be deployed as single user or multiple users on both PC and Macs.

Ed Coxon

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## ABOUT 4D

4D's mission is straightforward: to simplify and speed up business application development and deployment. It has been doing this for small-to-medium businesses, large enterprises, top-ranked universities, government agencies, independent developers, and vertical solution vendors ever since the nascent years of personal computing.

4D is committed to providing the best integrated software platform, where one initial solution can scale and adapt to the needs of standalone programs, multiplatform client/server applications, or Web-based Rich Internet Applications. Solutions that support a few people or as many users as needed.

This is why 10,000 developers and end-users in over 70 countries, working in dozens of languages, rely on 4D to keep their operations running smoothly.

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Tucson notebook from "Ivory" collection

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