the pilot project led to the use of object technology in the development of production systems. An overview of the pilot project follows.

Project description

The object technology pilot project developed two related products, a telecommunication network simulator and an automated test network, for in-house use. Both are software tools for system-level testing of a distributed system. These tools were used to automate what had been a manual process, so the projects were important, but any delays delivering the tools would not affect customer shipments or the quality of testing already underway.

Development and execution environment

The pilot developments consisted of distributed processes on HP Workstations executing HP-UX and were implemented in C++.

Development team

Figure 2 shows the staffing profile for the pilot project. Initially, I was the only member of the development team. I spent time up front, collecting requirements for the system and getting buy-in for the use of object technology.

Over the course of the next few months, the project was gradually staffed up. The first additional team member and I developed the first-cut analysis and design models. These were refined when additional team members were recruited. Each team member focused on a subsystem. Two integrations of the subsystems were completed before the staffing was reduced.

Mainstream use of the products of the pilot was initiated only 10 months after the project began.

Results

The pilot project succeeded in delivering two tools that met the needs of their internal customers. These products were delivered on schedule and have proved to be both flexible and extensible—they are still in use and have been modified and extended in functionality without redesign.

Following the pilot project, there has been increased support in the division for the use of object technology. The engineers involved in the initial pilot were seeded into other development teams, and some of them are involved in mainstream application development projects that use object technology exclusively.

The Fusion method has been carried over from the pilot and is now being used in the mainstream projects. Both the third-party and internally developed class libraries have been utilized in the follow-on object technology projects.

In summary, the pilot development using Fusion resulted in wider use of object technology and the decision to use the technology on products developed for external customers.

application that we had to change. Guess what! We deleted code to add a new functionality! A lot of functions were already there but nobody knew it. After drawing the Object Interaction Graph the structure became clear and we redesigned it. This led to less code, better structured code, and more functionality! The other method didn’t help us in this area. Fusion will be used from now on!”

And they did. They even bought FusionCASE tools to support it. He also confirmed the estimate that engineers produce design models for 2 to 4 system operations in a day. [Kris is referring to the data he presents in chapter 7 of the “Fusion in the Real World” book.] Here I demonstrated that Fusion is easily measurable and can deliver good estimates.

FUSION IN THE REAL WORLD


This book deals with best practices in object-oriented software development. The focus is on the use of the Fusion object-oriented analysis and design method.

Fusion was developed at Hewlett-Packard Laboratories in Bristol. The method integrates and extends the best features of earlier methods, including OMT, Booch, and CRC. Since its introduction in 1993, the use of Fusion has spread rapidly and is being used to develop a broad range of products. Today, many companies worldwide are employing the method on a variety of applications.

The book contains a coordinated collection of papers on the practical use of Fusion. It features:

- An introductory overview of Fusion together with full reference documentation.
- Detailed experience reports of live projects discussing how to introduce the method into a project and how to succeed using it.
- An account of how to minimize risk by integrating Fusion into an incremental and evolutionary life cycle.
- A report on metrics and defect tracking in a Fusion project.

This book collects together reports from the field that describe the practical lessons that have been learned from projects using Fusion. Numerous contributors combine their expertise to give the most comprehensive look yet at how Fusion is changing the world of object-oriented development.

The papers in the book are grouped under the following topics:

- **Case Studies**: Detailed case studies share with the reader hard-won lessons about what works well and why, and how to address a host of challenges that arise in OO projects. Practitioners embarking on OO development for the first time will find the discussion and insights rewarding preparation.
- **Applications**: Fusion has been used in a variety of interesting applications that have led practitioners to adapt the method to meet special requirements. For example, a telecommunications project had to deal with the challenge of designing applications that must interact closely with legacy systems. A commercial software house uses Fusion to develop custom software on fixed-price contracts. In another application, Fusion was adapted for process modeling.
- **Managing Fusion Projects**: Fusion is particularly successful when combined with an evolutionary development life cycle. Based on experience with this approach within HP, guidance is provided for managing projects using Evolutionary Fusion. Techniques for metrics and defect tracking on Fusion projects are also detailed.
- **Extensions to Fusion**: The final section of the book provides a forum for constructive evaluation of Fusion, and proposals for its extension and improvement. Extensions to support the development of distributed systems are described, as well as suggested improvements and alternatives to the Fusion models and processes.
What you build in the real world, can become part of your virtual one in Lego Fusion: Town Master. Image: Mashable, Niki Walker. By Lance Ulanoff 2014-07-31 17:28:36 UTC. Lego Fusion is Lego’s first foray into virtual reality and they’ve pretty much got the knack of it. The concept is simple and builds upon much of what Lego has done in countless digital games, especially the SIM-style ones, and while most of your time will be spent playing in the tablet (Android and iOS) game, Lego Fusion Town master also regularly sends you back out into the real world to build structures that will eventually end up in your.

Real-life content presents new language in context and encourages students to use English outside the classroom. Recognizes and builds on students’ world knowledge, curiosity and personal experiences, with integrated CLIL and cultural content in every unit. 21st century skills are embedded into every unit of the Student Book, allowing teachers to teach them confidently and develop students ready to succeed in today’s world.

Fusion uses an integrated skills approach, so language is introduced and skills are practiced through authentic, real-world contexts. ‘Language in Action’ activation tasks in every lesson provide topic-based opportunities for freer use of language, encouraging personalisation and productive skills. Fusion from the World’s Biggest Laser. At the National Ignition Facility (NIF), “inertial confinement fusion” begins with a very small, weak laser pulse. This pulse is split into 48 beams and sent to preamplifiers, which increase the energy to a few joules. With its pulsed magnetic field design, the Helion team claims it has found the elusive sweet spot in the fusion landscape: a reliable, cheap reactor that doesn’t require fine-tuned optics or complicated plasma confinement. In Helion’s reactor, electric currents flowing inside the plasma reverse the direction of a magnetic field that’s applied from the outside; the new, closed field that results effectively confines the plasma. In addition to predicting endorsement of extreme pro-group behaviors, research suggests that fusion is a predictor of a variety of personally costly pro-group behaviors in the real world. In a study of transsexuals considering sex reassignment surgery, individuals strongly fused with their desired sex underwent surgical procedures designed to permanently change their primary sex characteristics. Although most fusion research to date has focused on the nature and consequences of fusion, recent research has revealed some starting points for understanding the causes of fusion. Perceptions of shared essence, the belief that one shares essential core qualities with the group, appears to be a key building block of identity fusion.