



# Successful Implementation

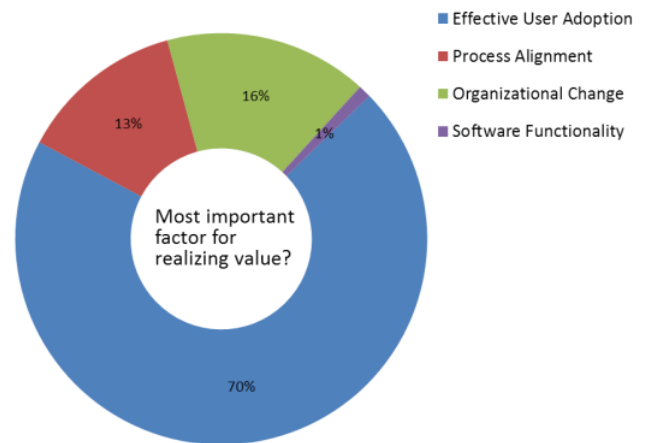
Recommended solution for  
successful user adoption

White Paper

## Software Implementation: The Growing Challenge of Today's Corporations

Effective user adoption is the absolute best predictor of enterprise software success.

The proper implementation of new software has become a main concern for corporations. Despite investing vast amounts of resources on implementation, success rates are often low and disappointing. Yet, failed implementations result in more than lost resources. Business procedures are performed either slowly or the wrong way, preventing the achievement of business goals. Users tend to be deterred by new software, which goes hand-in-hand with a decline in their motivation and satisfaction. Corporations that identify this challenge invest further resources in traditional solutions, which often fail to attain the desired results. This paper discusses correct implementation strategies and suggests the best solution available on the market today.



Source: Defining Enterprise Software "Success", sandhill.com and Neochange

### Why is Software So Difficult to Implement?

The challenges that arise from software implementation exist from both the user and the corporate perspective:

- From the user perspective, new software means dealing with a major change that forces users to acquire a new set of skills, and new ways of doing their job. Enterprise software keeps evolving continually, which means users must constantly attempt to keep up.
- From the corporate perspective, implementation calls for interfacing between different business units that must struggle to coproduce a single synchronized task. Training, IT and various other business units must often try to work together to define and execute the software implementation project. These units often differ in their personnel profile, terminology, goals and methods. Together, these factors make a joint effort extremely challenging.

### Failed Implementation Methods

Most implementation strategies can be classified according to their timing in relation to user needs. Strategies can be either offline or real time.

Offline strategies usually take place before the software is introduced to the user, in the form of activities such as training or e-Learning. These strategies predefine the gap between what the user knows and what the user should know, and attempt to provide users with skills and knowledge before actually facing this gap. Research accumulated over the years has proven these strategies to be ineffective. Classroom training retention rates are estimated to be an unsatisfactory 10%-30% at most. The relatively long and costly process of developing training sessions cannot match the rate of innovation of enterprise software. Training-oriented implementation efforts are likely to fail due to low knowledge retention and lack of support for the users when they face specific knowledge gaps in real time. The introduction of e-Learning, and specifically software simulations, has significantly improved training offerings but still suffers from low retention rates. The knowledge and skills acquired in an offline learning environment are difficult to recall in real time. Cognitive learning theories have long asserted that the most effective learning is achieved by real time practice. Contemporary Performance Support methodologies indicate that performance can be maintained by linking knowledge to real-time situations.

Implementation specialists, highly aware of the ineffectiveness of traditional strategies, have turned to [real time strategies](#) that provide specific information to the user at the time of need.

## Real Time Strategies and their Challenges

In theory, preliminary software training becomes redundant when all the required knowledge is embedded in the application to present itself as needed. Unfortunately, as is often the case, the theory precedes technology, leading to many unsuccessful attempts to create effective and affordable real time support. Technological limitations and user experience issues are often the downside of real time solutions. The main UI concern that influences user experience in real time technology is the location of support information.

Real time technologies can be classified as follows:

- **Off-Screen Real Time Systems:** Present the information in a different application, requiring the user to first locate the information and then apply it to the software procedure. The user experience is mostly manual and requires retrieval skills, processing abilities and multitasking, since users must perform job-related tasks at the same time. Help files, or Q&A, were among the first off-screen real time solutions. Although the information that users need might be available somewhere in those sources, most users have given up relying on such solutions in real time.

The next generation of off-screen solutions is Knowledge Management Systems (KMSs). These applications offer a strong search engine that, while easy to operate, requires users to stop whatever they are doing, search for the required information and process it in real time. When working with a KMS, users must adopt a new set of skills. This causes the implementation solution to require its own implementation effort, which suffers from the same challenges as any corporate implementation. Technologically, KMSs are fairly simple

applications that contain a database and a search engine. Their maintenance mostly requires writing skills. No integration with the main IT system is required, resulting in a relatively simple project as far as IT are concerned.

- **On-Screen Real Time Systems:** Offer a different user experience as they display specific information directly on the screen, requiring little or no research by the user. The information is usually focused on specific needs, resulting in immediate action and requiring fewer processing skills. Such technologies have been around for over a decade now, but have mostly suffered from design and content generation issues, leading to poor implementation when compared with off-screen solutions.

## On-Screen Real Time Support

In on-screen real-time systems, information is presented to the user in one of the following ways:

- **Side by Side:** A designated pane displays information relating to all screen elements at a single location.
- **In application:** Specific bits of information appear next to a specific screen element (field, status bar, window title, and so on).

Side-by-side applications, though more effective than off-screen solutions, still suffer from similar challenges. Users must refer to the information, process it and apply it to the relevant screen element. Depending on the pane size, the application sometimes blocks important sections of the screen, disorienting users and especially beginners. Users still need to manually activate the system in order to receive the on-screen information. When the user does not identify a need for support, none is offered. Such situations are mostly associated with experienced workers relying on their prior knowledge even when it does not serve them as in new application. The main advantage of side-by-side applications is that content is easy to produce and maintain.

In-application real time solutions are scarce mainly due to technological limitations. Though expensive to purchase and maintain, such systems offer the best real time solution in terms of user experience. The information is surgically inserted in the most effective and convenient way when the user needs it.

In-application solutions require virtually no processing, since information is presented next to its relevant location and its content only refers to the required instance (i.e. in context). Once the user has performed the relevant action, a new piece of information is inserted next to the relevant location until the process is successfully completed. In-application systems often offer a screen-sensitivity capability, which allows them to place information considering all other screen elements and to automatically initiate support according to what appears on screen. The implementation specialist can set triggers in the target application, launching support when sensing the need. The downside of such support applications is usually their cost

and content generation process. The latter requires programming skills and often necessitates IT personnel interventions, since full integration is needed with the designated enterprise software.

Up until recently, specialists looking to implement on-screen support had to choose between an affordable but partial side-by-side solution, and an effective but expensive and complex in-application solution.

## Leo Support Platform: The New Generation of In-Application Solutions

The introduction of the Leo support platform changes the real time support market by offering an affordable and simple in-application solution. The Leo platform provides a new approach to training, performance support and user help for software and SaaS solutions.

Leo is designed for performance: To help users get things they need to do done quickly, on real applications and in real time, without depending upon IT heroics or new infrastructure investments. Upon user request, Leo navigates any application, supporting the user when performing any action on the actual application in real time. Leo interacts with the user only when necessary. Like a GPS helping drivers get from point A to B, Leo helps users navigate corporate applications and accomplish any assignment. Because of its unique and patent pending technology, Leo works with any enterprise application, desktop software or SaaS service. Leo works at the UI level, analyzing the user's screen in real time in order to identify the next step. With Leo, content authors and training professionals can start adding value right away, without waiting to schedule IT resources to deploy.

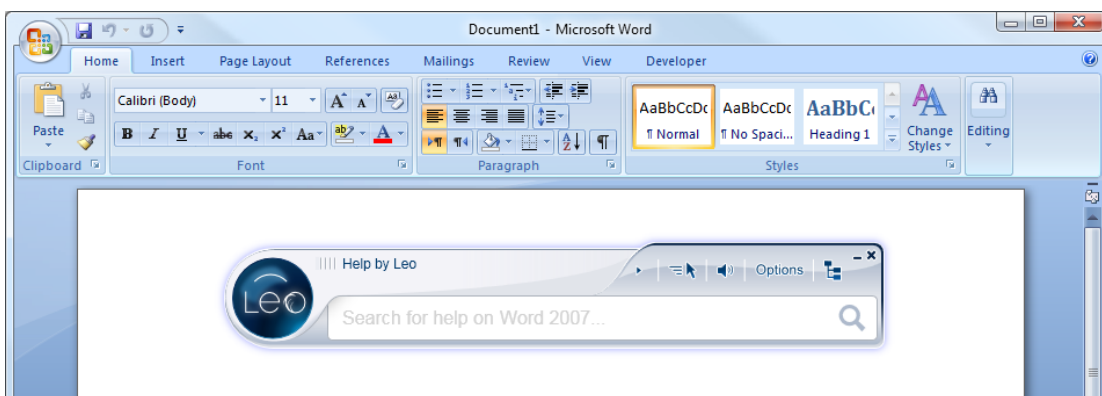


Figure 1: Leo search bar allows easy and intuitive search for dynamic content.

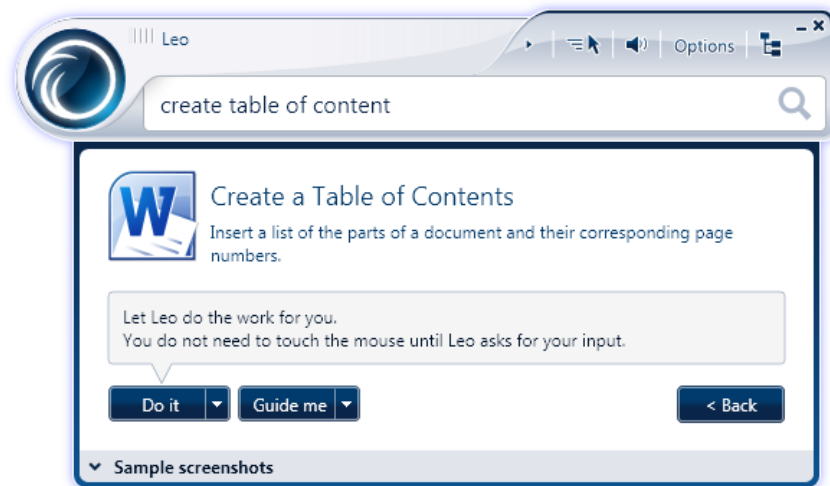


Figure 2: Leo suggests several ways of support including: Do It, Guide Me, Show Me, and Test Me.

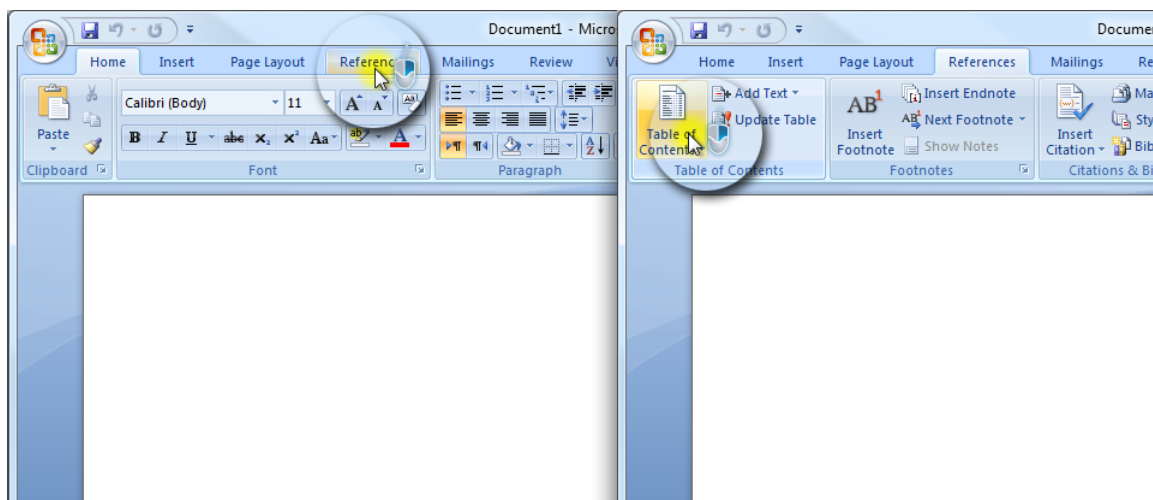


Figure 3: Leo navigates the target application automatically, supporting the user in real time.

## About the Author

Eran Gal is an e-Learning and Performance Support Consultant. Until recently, Mr. Gal has held the position of e-Learning and Instructional Technologies Manager in a large telecommunications firm. He holds over fourteen years of experience as an instructional designer and training manager in large corporations, mainly in implementing technology-based cross-organizational learning solutions. Since 2007, Mr. Gal has been leading a large-scale implementation project of an advanced electronic performance support system, supporting approximately 4,000 users nationwide. Mr. Gal is a doctoral student in the School of Education, Knowledge Technology Lab at the Tel Aviv University. His research focuses on the effectiveness of performance support technology in corporate settings. Mr. Gal has published several professional articles regarding performance support implementation in leading performance and learning magazines around the world.