Just-In-Time Learning: A Rationale

Introduction
This article discusses how organizations can increase end user adoption of their enterprise software with the use of just-in-time (JIT) learning solutions. JIT learning is a cost-effective and practical approach to end user learning where training is integrated into the application and available on-demand. This concept can be applied to all scenarios where end users must use software to get their work done.

The Importance of End User Adoption
There is a commonly used phrase for software that is purchased by an organization and never deployed: shelfware. There is not, however, a phrase to describe software that is deployed but not adopted by end users. Organizations spend a lot of time, money, and resources on software development and deployment, but not nearly as much time focusing on end user adoption. Furthermore, while you can hire developers to develop solutions and IT professionals to deploy and manage software, end users are not generally hired based on their proficiency with a specific type of software; end users are hired for their business skills in a specific domain. All organizations, therefore, face a challenge in ensuring that their end users can use deployed software efficiently and effectively.

End user adoption is important for a number of reasons, including:

• Your organization paid (or is paying) a significant amount of money for software, and are likely paying at least as much for software services. Therefore, it is important to get business value from the software. However, limited adoption of enterprise software by end users limits the ROI.

• Lack of or improper use of software can lead to data loss, data duplication, and compliance violations. For example, whether your solutions are focused on CRM, BPM, or collaboration, the software tracks your business artefacts such as transactions, contacts, leads, records, and documents. If end users do not use your software properly, that can lead to a significantly negative impact on your business.

• People are your most important intellectual property. If they do not use or do not know how to use the latest software, you are not helping them or your organization be the most productive possible.

• If you work in IT, it is your job to drive end user adoption. According to a study published in 2011 by CIO Insight titled “IT Adoption Trends: Where is the ROI”, more than half the respondents say that corporate executives hold IT responsible for the success or failure of enterprise software.

The End User Learning Challenge
End user training is fundamentally different from IT professional and developer training. It is common practice to send developers and IT professionals to classroom training for days at a time where an instructor trains them on concepts and walks them through examples and hands-on-labs. After the classroom training, developers and IT professionals continue to learn on the job as they master the skills necessary to make them successful in their jobs.
Today’s popular end-user training methods have their strengths and challenges. They include:

- **Classroom training**
  Sending end users to classroom training is expensive and is not always effective. It may make sense for specialized roles, but sending hundreds or thousands of end users to classroom training is expensive and more importantly takes them away from work.

- **E-learning**
  E-learning is a popular alternative to classroom training that is less expensive than classroom training. E-learning can be an effective way to teach end users some concepts. The challenge with e-learning, however, is that it tends to be too conceptual and is not helpful when end users are stuck using the software. Additionally, e-learning subscriptions may expire, meaning that end users must then rely on the memory of what they have studied.

- **Books and help manuals**
  While arguably the least expensive option, books and help manuals are not frequently used by end users. They tend to be difficult to navigate and are not very practical 'on the job' aids.

- **Internet Search**
  An increasingly-used learning tool, irrespective of the enterprise software, is Internet search. End users use Internet search to find tips and tricks when they need it, and to look for easy to consume videos and/or articles. They are not interested in lengthy whitepapers or conceptual discussions; they just want to know how to get their work done. Sometimes they are successful finding what they need; other times they aren’t. While Internet search is popular amongst users and has some advantages, it also has many challenges:
    - **Internet search is inefficient and not always effective**
      Users spend a lot of time looking for the answer. Sometimes, they don’t even find what they need.
    - **Internet search is distracting**
      The Internet is an interesting place; users can be distracted easily from what they are looking for by adverts, links, images and many other techniques that are designed to keep their attention. All of this detracts from them finding what they really need to get their job done. For example, if you send users to YouTube for training, they will likely not return to work for hours as they get distracted by amusing but irrelevant videos.
    - **Internet search is not always authoritative and up-to-date**
      Users may find what they think is the answer but it often turns out that the information is out-of-date, or even just plain wrong. For example, the answer might not apply to the correct version of software, or articles and discussions that have not been moderated can be misleading (or worse).
    - **Internet search is not in context**
      Users must launch their browser, go to their search engine and look for the answer. This takes them away from the software they were previously using. At one end of the spectrum, this is just inconvenient and inefficient. At the other end of the spectrum the user may never return to complete the task they were attempting.
    - **Internet search is only useful when users know what they are looking for**
      Your enterprise software will certainly have enhanced features and better ways of doing things that end users will not be aware of. By relying solely in Internet search, end users may never progress to using the software in the most efficient and effective way.
Just-in-Time (JIT) Learning

JIT learning is a cost-effective and practical approach to end user learning where training is integrated into the application and available on-demand. Unlike e-learning solutions, JIT learning is integrated into the application, making it very intuitive for end-users to access in-context while they work. While it’s not necessary for the content to be digital, most end users want practical, short “How-To” videos that show them how to complete the tasks they need to perform.

Figure 1 below summarizes the pros and cons of various learning methods for end-user learning, in terms of affordability and effectiveness of the method.

![The Learning Matrix](image)

Figure 1. The Learning Matrix

The JIT Learning Advantage

JIT learning is proven to be effective in organizations looking to drive broader adoption of enterprise software. The advantages of adopting JIT learning compared to other learning approaches include:

- **JIT learning is affordable**
  According to the Nucleus 2012 IT Spending Survey, “For new applications, classroom-based training should be limited and supplemented by in-application training and training guides.”

- **JIT learning exposes users to new capabilities**
  Being integrated in the application, content is surfaced that exposes users to new features and functions that can help them get their work done better.
• **JIT learning is on-demand, practical, and easy to use**
  JIT learning provides practical training as and when users need to complete a specific task. The on-demand content is easy to find, because it is integrated into the software and is contextual. Therefore it quickly provides answer to a particular “how-to” query and it allows users to quickly go back to the task in hand.

• **JIT learning is in-context**
  There is no need for users to leave the application. They can get the help they need from within the application.

• **JIT learning removes the cost of formal classroom training**
  To start with, overall monetary cost per user is magnitudes lower than classroom training. Furthermore, by removing travel costs and subsistence costs associated with classroom training, it becomes incredibly cost-effective to adopt a JIT learning strategy. Then, when you consider the cost of lost productivity associated with classroom training while users are away from work, the cost advantages of JIT learning are obvious and irrefutable.

• **JIT learning can be living and expanding**
  New training content can be quickly released to the end users through innovative delivery methods (such as Cloud-based content delivery), without them having to download newer versions of the content.

**Summary**

End user adoption of enterprise software should be a high priority for your organization. It is important for IT departments to move beyond development and deployment and to focus on ROI by increasing end user adoption. There are a number of options for driving awareness and education to end users but not all of them are effective or cost-effective. When thinking of end user education, you should evaluate JIT learning solutions as an effective tool that delivers affordable and practical training for end users while they work.