

The Enterprise Knowledge Portal: The Concept

Executive Information Systems, Inc.

www.dkms.com

eisai@home.com

(703) 461-8823 (o)

A Beginning

*Where is the life we have lost in living!
Where is the wisdom we have lost in
knowledge!*

*Where is the knowledge we have lost in
information!*

– T. S. Eliot, Choruses from “The Rock,” 1934

The Point

It is important that we not return to the goals of mere information processing and information management. We already have far too much information—we are overloaded. We cannot cure the problem by providing access to more information, or even by improving our efficiency in generating information. We will cure it by producing, acquiring, transmitting, and managing knowledge. It is not information we are interested in. It is knowledge. It is knowledge that provides competitive advantage, increased ROI, increased effectiveness, and a sound basis for making decisions. So, as the EIP space grows and matures, expect it to trend toward its subset: the EKP space. The future is EKP, not EIP.

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What We'll Cover

- Value Proposition
- Scenarios
 - John and the Windows 98 Desktop
 - Jennifer and Her Brand Spanking New EIP
 - Jackie and Her Corporate Knowledge Portal
- Conclusion

Value Proposition

- ▶ The Enterprise Knowledge Portal (EKP) will provide an improved capability to discover, create, acquire and validate knowledge valuable to the enterprise.
- ▶ Using the EKP (an enhanced enterprise information portal), a corporation will accumulate knowledge more quickly than its competitors, and arrive at the market with its new products and/or services sooner than its competition.

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Value Proposition (Two)

- ▶ Instead of a knowledge worker spending many hours assembling and reorganizing information in order to make informed decisions providing value to the business, with the EKP they will use an Artificial Knowledge Manager/*intelligent agent platform* to expedite knowledge processing and to arrive at information that is both relevant and valid.

Scenarios

- ▶ The Windows Desktop
- ▶ The Enterprise Information Portal
- ▶ The Enterprise Knowledge Portal

John and Windows 98

- ▶ John comes into work at 8:30 AM and boots up his PC. He signs on and then finds himself in his Windows 98 Desktop. He then needs to remember:
 - where he left his work the day before,
 - what subject he was working on,
 - how it relates to other subjects he's interested in,
 - what task he was engaged in relating to that subject, and
 - what application on his desktop he was using or should be using to accomplish that task

John and Windows 98 (Two)

- ▶ He must then:
 - open the appropriate application
 - select the file he was working with, and
 - proceed to complete his task.

John Does His Own Navigation

- ▶ During this process, the only help John gets from his computer is provided by the application he uses to complete his task. He receives no computer support at all in getting to that application. He gets there on his own based on his own knowledge of where he needs to go.
- ▶ Once he completes the immediate task in that application, he must then decide on what the next step in his work flow process will be, navigate his way to that application, open it, execute it, complete it, and move on to the next task, and so on, until the process is completed.

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Islands of Automation and Information

- ▶ In short, John works his way through a process of interrelated tasks, which his computer does not recognize as related. The applications used to implement the various tasks represent "islands of automation." From the viewpoint of his computer they are entirely isolated and unrelated.
- ▶ In using the applications, he may want to access heterogeneous data, information, and knowledge stores. These stores represent "islands of information." From the viewpoint of his computer, they are also entirely isolated and unrelated.

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Jennifer and Her Brand Spanking New EIP

- ▶ When Jennifer arrives at 8:30 AM she boots up into an enterprise information portal. The portal greets her with a personalized classification of information by subject.
- ▶ She clicks on a subject. The portal responds with another classification, breaking down further the subject matter category she selected. Eventually she works her way to the bottom of this hierarchical classification.
- ▶ At the bottom is a list of subjects or applications. If she opens a subject category, she gets a page of information on the subject she selected. She can then access this information for various purposes.

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EIPs and A Unified View

- ▶ If the information does not answer her questions, Jennifer can query data or document stores in the portal system to search for more information.
- ▶ If the EIP is properly integrated, she can access a variety of data, information, and content stores in the enterprise. The location of these stores is transparent to her. She sees no "islands of information," but experiences a unified view of all of the information sources in the enterprise.
- ▶ However, most current portal systems are not properly integrated. As a result, she is likely not to experience the unified view, but to experience only partial access to data or to text or document content.

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Jennifer Is Flying Blind

- ▶ But whether Jennifer experiences a partial or a unified view of all information in the enterprise, and whether or not she can access transparently whatever she sees in the portal interface, the portal still provides her no information about the validity of the information she is accessing.
- ▶ She cannot tell if an answer to a query or search request of hers is likely to be the correct answer. She cannot tell about the degree of its validity. She cannot tell how the information has been tested, and whether it has proved out in the past. She cannot tell whether the information can help her make a decision.

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Jennifer Is Flying Blind

- ▶ In short, she is flying blind, with plenty of environmental input, but precious little radar, with lots of information, but not a clear idea of what is relevant.

Jennifer Still Has Islands of Automation

- ▶ If she opens an application rather than a subject category, Jennifer can use the application to perform a task. If the portal system is properly integrated, she can use more than one application to perform the task.
- ▶ But most current EIPs, while able to provide access to more than one application simultaneously, cannot integrate applications into an automated workflow or task sequence, so Jennifer has to figure out the workflow, or to remember or reinvent a workflow she previously used.
- ▶ Her computer still presents "islands of automation" to her instead of a synthesized higher order application that she can use, reuse, or enhance to make herself more productive.

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Jackie and Her Enterprise Knowledge Portal

- ▶ At 8:30 AM, Jackie boots up into the Enterprise Knowledge Portal. Like Jennifer, she sees a personalized classification of her subject matter, and when she selects a category she drills down into a hierarchy of sub-categories of subjects and classifications.
- ▶ A nice thing for Jackie, though, is her ability, at any level of this classification, to see a conceptual network of the non-hierarchical, associative, and causal relationships that any subject matter or application concept has to any other subject matter or application concept.

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Jackie and Her Enterprise Knowledge Portal (Two)

- ▶ If she drills into "sales performance," for example, she can immediately expose relationships to sales performance metrics, to profit metrics, to sales forecasting, to sales growth, and to numerous other concepts related to sales performance.

The Avatar and Personalization

- ▶ Seeing the conceptual network, a model of the relationships existing in her own mind and in the minds of others in her company, Jackie can quickly hyperlink from her entry into this conceptual network to any node that she thinks is relevant to the work she wants to do. She does not need to think about the relationships that let her link to the desired node.
- ▶ The EKP, through an intelligent agent – an avatar representing her preferences and previously recorded behavior – has tracked and maintained her previously created relationships in the form of her personalized conceptual network. It is there, ready for her to access and to enhance whenever she wants to continue work where she previously left off.

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Jackie Has Radar

- ▶ Next, Jackie works with her conceptual network by selecting a subject matter or application node of the network. If she accesses a subject matter node, she gets a page of information.
- ▶ But along with the information, she also gets information about how valid that information is, and about the previous usage and testing that has validated it.

Jackie Has Radar (Two)

- ▶ She has not only information, but also the means to determine its value and its relevance. She is flying with radar, and she can tell which portal inputs are important to her and which she can screen out or relegate to the outer reaches of her conceptual network.
- ▶ If the information does not answer her questions, Jackie can query data and content stores with no "islands of information" limitations.

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Jackie Has Workflow

- ▶ She can transparently query and search any kind of data, information, or content in the enterprise.
- ▶ The portal provides her with a unified view of information and with a way of transparently accessing, combining, and then evaluating it all.
- ▶ When she wants to move beyond subject matter to work that uses or transforms data, information, or knowledge, she can drill into a subject matter node of the conceptual network until she accesses a part of the network forming a workflow.

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Jackie Has Workflow (Two)

- ▶ At that point the portal will provide her with the option of either automatically executing or guiding her through manual execution of the steps of the collaborative or individual workflow she selected.
- ▶ The workflow will utilize applications at each step, and integrate them serially within its framework.

A Synthesized Application

- In this way, the EKP provides Jackie with access to a sequence of applications supporting the steps in a workflow.
- Her computer, through the EKP, no longer presents "islands of automation" to her. Instead it presents a synthesized higher order application that Jackie herself, through her avatar, created in previous uses of the portal.
- In addition to providing integrated individual and collaborative workflows, the EKP also transcends EIPs by providing Jackie with formal knowledge production tools and related workflows.

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Using the EKP Jackie Can Reinvent

- ▶ So when she wants to innovate or to manufacture new knowledge through the portal, she can use old knowledge stored in the portal knowledge base, along with the diverse information and data stores, and the formal knowledge production tools, both individual and collaborative, available to the portal to execute new and old knowledge production workflows.
- ▶ The result is new knowledge, enhanced validated information, that Jackie can later access from the portal system's knowledge base.

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Conclusion

- ▶ Comparing the three scenarios, one can see that the EKP is the only one of the 3 alternatives that fully supports:
 - formulating and validating knowledge claims, and
 - locating and using old knowledge to make new knowledge
- ▶ So it's the only one of the three that really supports the idea of the adaptive, competitive organization at the level of individual work flow
- ▶ And that's why the future is the EKP and not the EIP

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The End