
 Workflow systems are like the ‘DNA’ mechanism of any Enterprise. The real challenge is to make sure it propels performance growth and maintains a form of order, just like the human DNA code, which runs on a sequence of digital data ‘ACGT’. Skelta Workflow.NET dominates, like a digital nervous system within enterprises, transcending challenges of providing inter-operability, cross platform integration & pervasive flexibility for developers and end users.

Introduction

“Any task performed for a common goal with parallel and dynamic sequences of activities within an organization”, can be classified as a workflow activity. In simpler terms, assigning tasks, fulfillment of these tasks & monitoring the activities with all its deviations can broadly be classified as a workflow management function. Workflow has been in existence since the inception of the term ‘Business’ itself, thus creating a ‘must have’ syndrome within enterprises.

The ‘Power’ & ‘Potential’ of workflow have been boosted with the high dependency on paper, labor intensity, susceptibility to tasks “falling through cracks”, no easy way of tracking status and no means of measuring process time and cost statistics. Furthering its growth are huge volumes of data that have accumulated – that need to be transformed into information and then into knowledge through an effective use of the Workflow system.

The relevance and purpose of ‘Information’ can be measured through Contextualizing - Categorizing – Calculating – Correcting – Condensing, & used in business intelligence after this has been Compared – Consequence’d – Connected and exploited conversationally. Given the definition of workflow there are a very large number of business activities in an organization, which fall in the workflow category. These could include: Automation of Purchase Orders, Capital Appropriation Requests, Employee Performance Reviews, Weekly Time Sheets, Loan Approvals, Claims Processing, and many more.

Skelta Workflow.NET is a web based embeddable workflow engine tightly integrated with Microsoft Office suite of products. The engine is based on generation next “Internet X” framework from Microsoft “The .NET”. It provides developers, the power to rapidly deploy applications using the rules components and the flexibility for end users to construct and modify rules within existing software. It includes a complete web based graphical workflow designer, supports persistent workflow.
Workflow guidelines

Workflow systems cater to broad and rudimentary elements within business function areas, such as designing graphical workflow maps, designing of electronic forms, embedding external applications - conditional routing - complex business rules without programming. Also, monitoring can be easily done with measurable units.

Workflow.NET, using the power of Microsoft.NET framework

To identify the real benefits of a workflow system, let’s look at a simple Leave Application Procedure. An innate feature of a LAW (Leave Application Workflow) is to assign a task of searching for a pending leave and the process of approval / rejection. The flow starts with submission of leave application, to an accounts manager directly responsible for the employees’ performance, to scaling the same, due to lack of response time to the department head. The backend process will involve digging databases for available leave / leave adjustment in corporate database – HR updating / rollback on financial pay-roll databases, etc. So, the three broad areas of the LAW process includes, @Designing of company specific LAW, @Executing the LAW, & @Analysis of responses and performance timelines of the LAW. Let us define a comparative analysis of the power that encompasses Workflow .NET.

Skelta Workflow.NET is web based and comes along with 3 broad functions:

@Designer – In most traditional workflow systems the design is a laborious process handled by system administrators and developers who also have to be equipped with native language programming of the software itself. Once the designer is set to its route value, it is again almost impossible for the administrator to maneuver with the routing; creating a fixed bound point-to-point, rigid communication protocol with the enterprise workflow system.

Secondly, designers of traditional workflow systems cater to fix number of shapes / task enforcement, making it difficult for system developers to add on new innovative assignments.

Skelta Workflow.NET @Designer helps companies to dynamically create – anytime – anywhere workflow designs with the help of web based controls developed in C#. The system comes along with a set of pre-defined shapes, such as Approval – Run Class Script – Run Script – Start process – End process – Pause Process – Run COM object – Database Storage operation, etc, but also allows developers to add more shapes at any given time.

@Unleashing the real power

the Skelta Workflow.NET designer allows adding variety shapes and tasks thus removing dependencies of process / integration areas. You can use the designer for making an intelligent knowledge management system, or use the same for a content management system to update content repository. The workflow system is the
playground & direct manifestation of the web controls allowing supreme flexibility for developers – end users.

@Workflow Engine – All workflow engines are robust and tough to crack. Built around the concept of strong architecture they are embedded with millions of lines of codes. Though the purpose is served, it keeps no room for future core process integration and becomes a closed loop system, with no web / wireless interface. Stepping back to the real purpose of workflow systems, the routing of task and issue management functionalities needs to be pervasive in nature to nurture from various interfaces.

Skelta Workflow.NET @Engine helps companies to leverage the power of Microsoft .NET framework and component based modeling. It is also capable of inheriting existing user database from any application. Build to do anything - Skelta Workflow.NET @Engine runs sets of codes executing processes – task, which could be embedded into software with simple XML tags. Here’s a small example of an executable code that could bring the system to life.

@Unleashing the real power

This piece of code embeds a complete Graphical Workflow Designer in your web page & stores the definition of workflow in industry standard XML format.

```xml
<Workflow:WebDesigner id="WebDesigner1" runat="server" FileName="leaveapplication.xml">
</Workflow:WebDesigner>
```

@Reports – Theoretically, and fundamentally Workflow systems lack in reporting and analysis skills. The key to approaching quantitative truth – particularly when examining enterprise data marketplace – is to consider data from as many reputable sources as possible. No one has all the answers. But taken together, multiple sources, coupled with healthy doses of common sense and business intelligence, create a reasonably accurate picture. While working with a Leave Application Workflow, the analysis and report is primarily responsible for presenting a complete leave update in forms of reports to the HR and account manager within the company.

Skelta Workflow.NET @Analyzer & Reports - Tries to encapsulate multi-dimensional pattern recognition as a method of organizing reports and knowledge. Offers examples from business data and human cognitive studies to illustrate how it can facilitate taxonomy development, shape response period, Identify critical paths, shape

“In the same way that the electron microscope has permitted scientists to examine the details of life at a much smaller level than they previously could with earlier generations of microscopes, so too has the Skelta Workflow.NET analyzer permitted large companies to obtain a much more detailed, micro-level view of their customers.”

Arvind Agarwal
CTO
Skelta.Com

“A workflow system resembles a ‘DNA’ mechanism for any Enterprise. The real challenge is to make sure it propels performance growth and maintains a form of order, just like the human DNA code, which runs on a sequence of digital data ‘ACGT’.”

Shiladitya ‘Sunny’ Ghosh
Knowledge Manager
Skelta.Com
wise reporting pattern, expertise location and other processes.

@Unleashing the real power

the Skelta Workflow.NET analyzer & reporting tool comprises of 2 broad categories:

* **Analysis Report** – (Identify critical path & most used paths)
  - Total response time of workflow
  - Total response time between nodes
  - Average time taken for workflow
  - Average time taken between nodes

* **Optimized response time** – (Identify each shape time taken as a part of overall Workflow)
  - % time for path processing for all workflows
  - % time for a particular instance / process flow in the workflow
  - % time taken for a specific critical path

"In the same way that the electron microscope has permitted scientists to examine the details of life at a much smaller level than they previously could with earlier generations of microscopes, so too has the Skelta Workflow.NET analyzer permitted large companies to obtain a much more detailed, micro-level view of their customers", says Mr. Arvind Agarwal (Chief Technology Officer – Skelta)

**Roadmap of Skelta Workflow.NET**

*Skelta Workflow.NET* is a future platform for development houses and enterprises. Build around the concept of an ASIC (Application-Specific Integrated Circuit), a fundamental base, which has paved the road for **C-E-C** (Collaborative Enterprise Communication), on the brink of another high-tech revolution. It is designed for businesses to add the final veneer of personality needed for their specific process optimization and communication needs.

The scope & promise of the open architecture is helping us to build Knowledge Management & Customer Relationship Management software with strong analytical forecasting.

“We at Skelta are trying to achieve the common vision of creating Collaborative Enterprise Products – catering to Community Metaphor, Document Management, Discussion platform, Process Automation, Virtual Meetings & Personalization of Portal Interface”, says Paritosh R Shah (VP - Strategic Sales - Skelta)

**For More Information**

For more information about Skelta’s products and services, call the Skelta Sales Information Center at (703) 813-8107. In India, call the Skelta Development Center at 91 (80) 25527799/0371. To access information using the World Wide Web, go to: [http://www.Skelta.com/](http://www.Skelta.com/)

© 2004 Skelta Software Pvt. Ltd. All rights reserved.

This case study is for informational purposes only. SKELTA MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS SUMMARY.
The names of actual companies and products mentioned herein may be the trademarks of their respective owners.