

Inspired by Innovation.

White Paper - Technology Approach

Executive Summary

The new generation of Software applications will be defined by Technologies and Standards including Service Orientated Architecture (SOA), Web Services, XML and the holistic use of the internet as an all encompassing communication medium.

Open Source Tools and Components, Object Orientated Architectural Design and Web Services are increasingly being utilised and Embraced by Development Teams and Technology providers.

Subscribe-HR uses an Object Orientated Model to deliver Integration, Operational Scalability and Flexibility. The Subscribe-HR Solution allows for end-users to configure and integrate the solution without the need for complex coding. This approach radically reduce maintenance costs and complexity of the system.

The Subscribe-HR System itself has been built using our Proprietary Platform meaning, that the majority of the core system has been built without any coding being performed. This means that development is faster, more accurate and less expensive with greatly reduce code maintenance. Excessive code will invariably lead to application decay over time.

The Platform Architecture is separated into 3 core parts. Interface, Business Logic (Includes Cache Server) and Database. This allows us to change or completely update our user interface easily and quickly.

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The Next Generation

Traditional Client/Server systems do not offer business benefits that are required by organisation that are utilising the latest dynamic, agile business models to increase their revenues and competitive advantage. These Client Server Systems are onerously complex and expensive to maintain and integrate and their rigidity has many organisations looking for alternatives. The Next Generation of Computing Systems are now available to lead the way forward. This Next Generation creates a world where information extends past the realms of the Organisations. Now we are seeing the advent of many innovative and mobile devices that underpin the mantra of Next Generation Computing.

These are some of the standards that enable the emergence of a new approach to computing.

- Service Orientated Architecture
- Web Services
- XML
- The Internet

It is extremely difficult for Vendors with out dated technology to conform to SOA standards meaning that unless the system is principally design using the SOA standards it cannot deliver genuinely Mobile, Agile, Value for money Computing Solutions. They are finding themselves being superseded.

Legacy.....Client Server.....SOA

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Current System Limitations

Your Business needs constantly change and as a result the data, relationships and processes in your HR System need to constantly update in-line with these changes. In all Client-Service base solutions, these changes are extremely costly, time consuming and complex to make. This is because all the relationships and business logic in these systems are hard coded. An Update or Upgrade in the client service arena is encompassed by some simple component ad-on, some additional fields in Forms or a couple of additional workflow options. The reason why these update and upgrades are so limited is because the core of the system cannot be touched. This is also why the development cycle of Client Server based systems are infrequent and drawn out, offering little value.

Subscribe-HR is designed using Object Orientated Architecture which means our ability to alter and change all parts of our application is seamless, easy and effective. Our development cycle is based around weekly and monthly releases not annual and biannual token releases. Our Solution has been built from Scratch using the SOA methodology

The Revolution

Most nearly all SME: Human Resource focused applications are design and built utilising complex relational database structures. This means that they are constrained by various limitations. Mainly data models containing thousands of tables and fixed relationships between the core database/business objects. This results in total inflexibility once a system or version is released. In the majority of relational databases structures, the data layers and logic layers are tightly welded together but the data models sits separate from the logic (Code). Usually, processes are defined as series of steps in the logic and each step references all the data and relationship information from the data model (Layer). Therefore, any changes that need to be made to the Data Structures and Relationships, require complex and costly analysis and change in the code to keep current features and functions working and to roll-out new features and functions. At the same time, changes to processes in the code (Logic) are complex because of the attachment of the data relationships and the reliant process steps in the hard-wired code.

Ubiquitous Computing - Agility

Subscribe-HR is revolutionary because we do not use a relational data model. Our technology structure is Object Orientated. Our structure is modelled around Objects that can change relationships and business logic easily. Our Objects and their relationships are managed by a separate cache server. As we don't tie data and logic to a relationship model; data, relationships and models can be much more easily and cost effectively changed. We have far less overheads to manage, update and maintain our framework. In the Object/Relational approach used by some of our peers, the need to map object models to relation models limits what developers can do with inheritance or how granular classes can be.

Data Definitions (Objects) can be added or changed without complex logic rewrites or complex database restructuring. This flexibility greatly expands the scope of what you are able to do with your solution. At a point in time you may wish to integrate your Subscribe-HR solution to an external application like, Finance, Performance, Surveys and that later on you may wish to extend your Subscribe-HR solution to model/incorporate your requirements directly into your Core-HR module. This can be done easily without the need for a massive coding and database restructuring. The majority of the core scaling can be done through the User Interface.

Relationships can be updated easily through the User Interface. This is not possible in client/server relational models.

Process Steps in Subscribe-HR are not hard-wired, they are loosely grouped to other steps. XML is used to talk to other systems and it is also used for processing with the Subscribe-HR application. We can as easily talk to other systems as we can talk internally within the Subscribe-HR Solution. Ultimately, Subscribe-HR offers programming without code. We offer end-users the ability to Extend and Scale their solutions for themselves. Our development environment means that there is less room for error, systems are more easily maintainable, there is far less code involved and the solutions are faster and easier to build, maintain and upgrade.

Next Generation / On-Demand

User Interface Separate from Business Logic

From our Experience and Development Research, User Interface requirements and Standards are constantly changing which means that a systems user interface need to be reworked quite frequently in comparison to technical components of a system.

Our Interface layer is totally separate from our Data and Business Logic layers. This means that we can improve and change our UI on an on-going basis, without it affecting the other system layers. Data and Logic can be treated in the same way: if they come from Data Entry of system integration.

Summary

The Success of the New Wave of Computing Solutions is wrapped in the fact that unless they are design from the ground up as a Service Orientated, Object Orientated Solution, they will not be able to truly deliver the benefits, power and cost-effectiveness of the internet. They will not be able provide Subscription Value and the Communication Efficiency that need to reach beyond intra realms of the business. Those Client-Server based providers that wrap additional layers around their code in an attempt to bridge the gap between themselves and the next generation, will lumber themselves and their customer with Risk, Cost and Conflict based Complexity.

About Subscribe-HR

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Subscribe-HR delivers On-Demand, Pure-Play Recruitment and Human Resource Software-as-a-Service. Our Solution enables Businesses to become more Dynamic and Agile, and focus on core Business Activities.

Moving forward, it is critical to the success and prosperity of all businesses that Computing Solutions which deliver Value, Scalability and Flexibility are utilised.

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