

## INTRODUCTION

The purpose of the Aspire Productivity Library and Executive is to accelerate the delivery of thin client applications, ensuring high quality, consistency and maintainability whilst reducing reliance on scarce .NET expert personnel.

The Aspire PL&E is built solely upon established Microsoft .NET technologies and provides a proven, flexible development environment for delivering highly scalable and stable thin client solutions. Applications developed in the Aspire PL&E environment contain no proprietary code and are deployed in exactly the same manner as any other software whilst delivering a number of benefits some of which are outlined below:

## HIGHLIGHTS

- Cost of delivery reduced by at least 30%.
- Time to deliver solution reduced by at least 30%.
- Built on standard Microsoft .NET technology no lock in to proprietary software or vendors.
- Database agnostic: interfaces with any ODBC / OLE DB database; develop in SQL, deploy on Oracle.
- Co-exists with existing technologies; VB6, Web services, etc.
- No .NET skills required for 90% of development cycle.
- Cost effective to maintain and make changes to delivered solution.
- Development independent of database skills or type.
- Secure and interfaces with most standard security models.
- Many pre-built snap-ins for common functionality.

## BACKGROUND

### THE TECHNOLOGY CHALLENGE

For years Microsoft have enhanced the tools used by the Software Development community, providing new functionality and software build enhancements and presenting developers with upgrade considerations and challenges that a 'move to the latest version' requires. With the introduction of .NET, Microsoft has completely changed the technology and the way of working that has been familiar to the Visual Basic (VB) developer for years. Any move to developing a solution in .NET is considered to be a "rewrite" and not a straight forward upgrade. Like all development languages such as VB, there is more than one way of approaching any potential development requirement, this is the same with .NET, however there are just more alternatives and therefore pitfalls.

Most VB developers are out of their comfort zone for the first time in years, finding themselves in unfamiliar territory. In a similar vein to the old three-tier Client/Server approach in VB, .NET and its extended functionality opens new levels of complexity. Developers simply do not know which area to specialise in i.e. XML, web-services, data access and usually end up being a jack of all trades, but a master of none. Companies are faced with a workforce that has little or no real commercial experience of .NET and consequently the technology strategy and direction is largely driven by developers wanting the best (most "marketable") skills on their CV.

Technical choices such as VB against C# are being made on the basis of no real commercial grounds. Development teams will often steer their management away from product based development acceleration tools such as the Aspire PL&E and the Cast Iron Application Router that will save time and money and will recommend that they 'build there own'. Nine times out of ten, the developers are the only ones to benefit from this approach as they gain the experience of doing it themselves; the business simply lets the development team reinvent the wheel, again. Interestingly, VB developers are choosing C# as the preferred route even though they have an established VB background, even though when compiled .NET execution is no different. This extends the learning curve and the risk to the business.

### WHY RE-INVENT THE WHEEL?

The prospect of systems that have to be rewritten in order to move into the new world of .NET is often very difficult to justify on technical grounds alone. Moving to an entirely new technology platform with in-experienced developers is very risky and does not bode well with the business that has most often than not spent money developing systems in VB and does not want to replace them until the shelf-life of the project/system has expired or sufficient ROI has been realised.

The Aspire PL&E not only provide the basis of any scalable, robust and secure e-Business projects, it also allows for the old VB and the new .NET applications to co-exist in the same architecture/environment. Aspire will minimise risk and cost by utilising much of a companies existing VB code reducing the necessity to 'rip and replace', but also provides the VB developer a familiar and accelerated environment to work in.

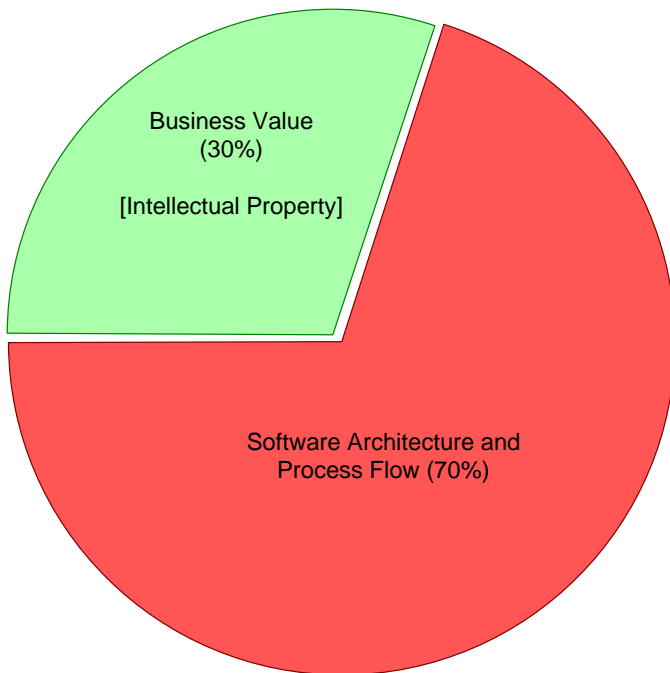
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## ALL WEBSITES FUNDAMENTALLY DO THE SAME THING

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With the odd exception, all browser based solutions pretty much perform the same tasks. They all display information, stop and wait for the user input, perform some kind of action(s) and then respond by displaying information again.

Most websites conceptual design are identical and most logical designs are similar. It is only the physical design and functionality that is unique. This is where Aspire PL&E comes in. It is a generic website engine and the foundation for any website development. Written using standard Microsoft .NET technologies Aspire PL&E has all of the common functionality required by a browser based solution that makes it a truly configurable and extensible platform.



### A TYPICAL SOFTWARE DEVELOPMENT?

Only 30% of most web development projects contribute to the functionality and business value with the remainder of the effort being spent developing the architecture, process flow and navigation.

## ASPIRE BUSINESS SOLUTIONS OVERVIEW

### ASPIRE PRODUCTIVITY LIBRARY

The Aspire PL is dedicated to one purpose – increasing business value through:

- Accelerating delivery of agile, adaptive standards-based business applications.
- Reducing risks of missing time-critical delivery dates.
- Empowering VB developers to become expert in .NET Component and XML Web Services development without recourse to extensive offline training and support investments.
- Leveraging existing IT assets by enabling VB applications to co-exist with .NET-based applications rather than have the costs and risks associated with rip-and-replace of business applications.
- Enabling IT departments / development companies to respond to business needs for planned and unexpected needs.

### ASPIRE EXECUTIVE

Aspire Executive is a generic website engine and the foundation for any website development. Written using standard Microsoft .NET technologies Aspire Executive has all of the common functionality required by a browser based solution that makes it a truly configurable and extensible platform.

The common infrastructure functionality required by all e-Business solutions are included in Aspire, these include:

- Site Navigation
- Validation
- Authentication
- Security
- Data Access

Aspire Executive also provides, without any .NET coding:

- Dynamic Data Capture with advanced validation facilities
- Reporting functionality through integration with Aspire Reporting Services
- Internal database / database administration benefits
  - All development can be conducted without requiring DBA skills
  - Modifications to the client are reflected globally

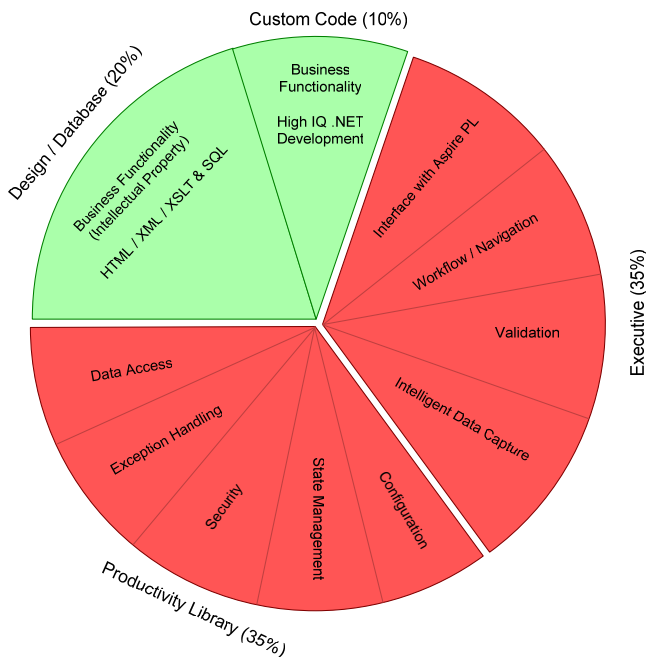
- Retrospective changes to the subject database are reflected in all related client front end allowing DBAs to be in control of their databases
- Most data related functions are pre-built, e.g. Validation

## HOW CAN ASPIRE SAVE TIME AND MONEY

When developing Aspire centric website applications you already have a generic engine that is the foundation for all website developments. Although written in .NET, very little .NET skill is required in the majority of cases. The majority of the site will be developed using a series of configuration tools that control the website.

Microsoft .NET architects and developers are expensive and ones with good experience are rare and in high demand. The fundamental element to the cost and time savings using Aspire is:

- Not having to write manual code to perform standard / generic tasks and then to develop them again and again;
- Assigning your key developers to concentrate on business specific functionality, often where a Client's IP resides;
- Using a more readily available and cost effective skill-set (XML & SQL); and
- Not having to test the standard proven functionality.



- 1 Aspire PL&E written using industry standard Microsoft .NET Technologies
  - 2 No .NET skills required to develop 90% of web-page functionality, just HTML, XSLT and XML
  - 3 Database / SQL still required to configure Aspire DB and to write business specific SQL
  - 4 Expensive Hi IQ .NET skills can be assigned to develop business specific functionality
  - 5 Aspire PL can be used to further accelerate business specific functionality if written in .NET
- Existing assets in VB/COM technology can also be used and managed by Executive

We anticipate an approximate cost saving in the region of **thirty percent (30%)** of the usual project cost.

The delivery time should be reduced by **one third (1/3)**.