

## ***Integrating Software Applications***

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*Integration*

*Opportunities for*

*Efficient*

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### **Executive Summary**

This solution paper describes how IonIdea can work closely with Sodexo, Inc. and help you to integrate all your current applications, on a single platform. As a part of the project, we can explore the possibilities of converting some of your current applications to a web based solution. We will also explore the opportunity of building a portal around your existing applications on various platforms.

IonIdea is offering a turnkey solution from helping you identify tools and technologies to architecting and building a solution and later training the users on the software.

IonIdea is interested in offering you the solution on MICROSOFT.NET Framework.

Integrating applications is one of the core competencies of IonIdea. You reduce performance and delivery risks adopting IonIdea's mature application

integration methodology. IonIdea hosts a 'Center for Excellence on .NET' in its facility in Bangalore. We offer a combination of on-site and off-shore service models to substantially reduce your costs.

### **Introduction**

The dream of every IT Manager is to have all information of an enterprise stored in the same repository or a database. The origin of the Enterprise Resource Planning (ERP) solutions can be traced back to this desire.

However, we find that most sizeable organizations have their enterprise data stored in a variety of applications and databases. These applications work wonderfully in isolation.

### **E.A.I.:**

Unfortunately, business processes do not work in seclusion. The sales are almost always connected to purchase. It may also be connected to the human resource deployment / utilization.

# EAI



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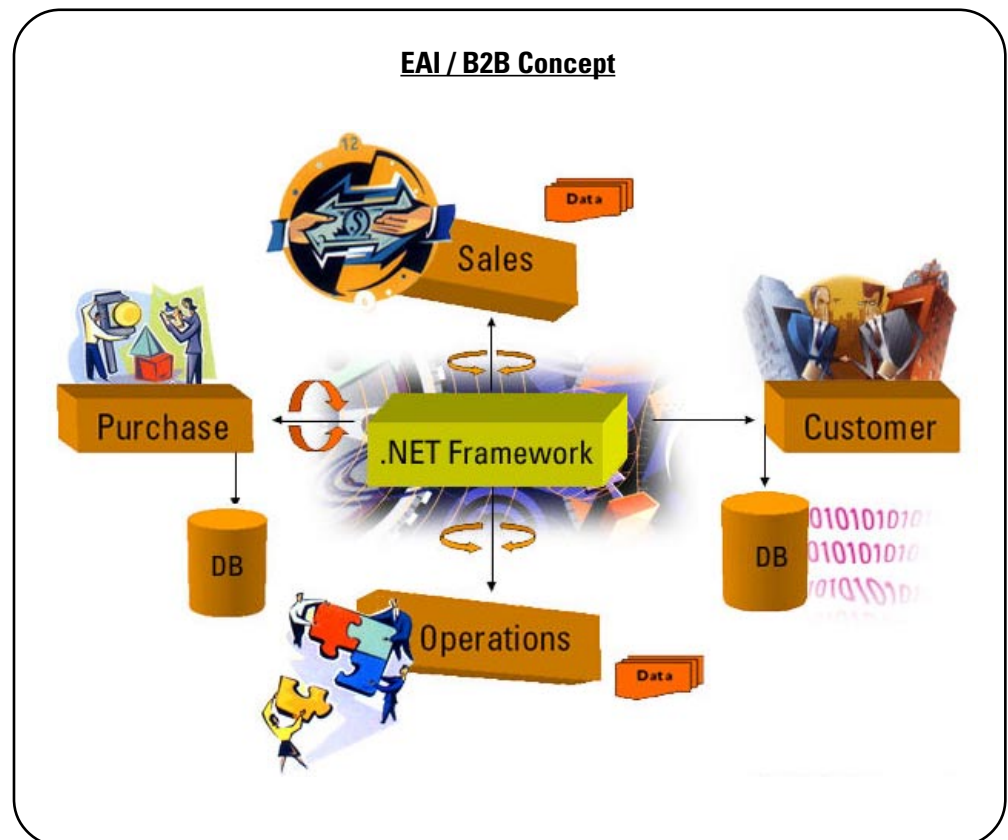
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Everything is connected to finance. Every organization having multiple data sources spends a considerable amount of time integrating data to deliver cross functional information. To improve productivity and decrease manual intervention, we perform **Enterprise Application Integration (EAI)**.

**B2B:**

This idea can be carried further to involve more than one company. Companies operate in a web of relationships. Vendor and supplier is one such relationship. The dimensions of each such relationship vary between companies and over a period





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of time. When EAI is carried between companies, it is popularly referred to as **Business to Business (B2B)**.

### Integration Opportunities

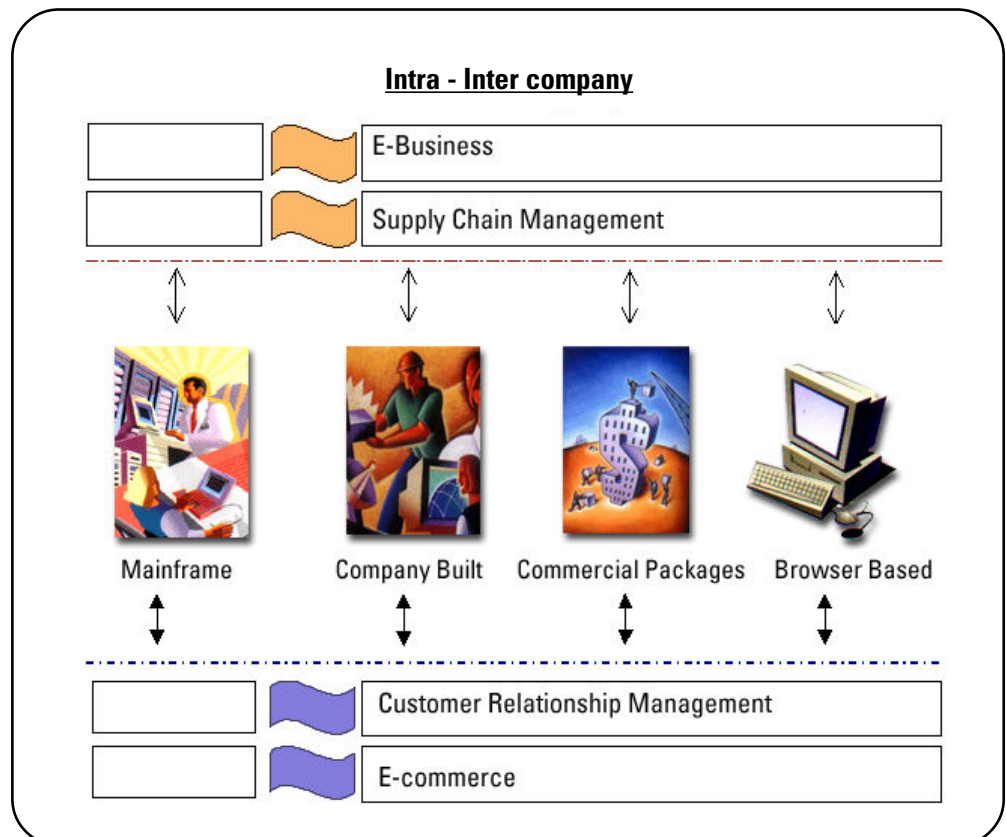
Application Integration is a huge opportunity for every IT Manager. There are many areas where Integration can be contemplated.

Typical areas are:

- Business Process Integration;
- Business Partner Integration;
- Process Automation;
- Business to Business Aggregation;

### E-Business Concept

Business Process Integration





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**'Business Process Integration'** is a way of integrating applications within the company.

Over a period of time, we would have computerized most of our functional applications. This may typically include Human Resource Management, Sales Management, Marketing Management, Accounts & Finance, Operations and Maintenance.

We find that over a period of time, each of these applications would be an island of automation. Each contains data very valuable to the particular department. The problem only begins when we try to get multi-department information.

Today, our systems resemble an archipelago. Each department is an island. The opportunity before us is to connect these isolated applications in a manner that mirrors the idealized workflow of your company.

This is ideally done to improve efficiency of our processes and people. This is an ideal situation where

we spend our time doing the same task more than once. By integrating data within the system, the different perspectives to the same data get merged. Employee Portals are other popular integration tools.

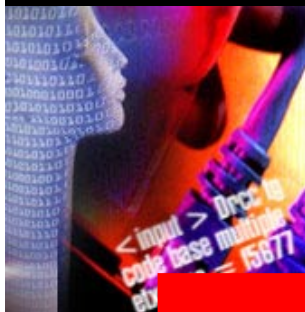
The other situation where a B.P.I. program becomes very effective is when most of our employees work at customer sites. The common applications in this sphere are the time sheets, quality sheets and work completion reports.

The white paper on 'Intranet Portals', attached with this document gives you a fair idea on the possibilities in your organization.

### **Business Partner Integration**

When companies tend to work closely with each other, we find evolution of the **'Business Partner Integration'**.

The most common applications in this sphere are the customer feedback form and the work monitoring reports.



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These 'point of work' programs aid clients to give a feedback on the effort of our employee in his premises. In a situation like yours, you can enhance your service profile by building applications that provide prompt feedback / actions to your customer's concerns and issues.

As we go higher in the value chain, all knowledge transfer and experience sharing between a supplier and a customer qualifies for this activity. Electronic Data Interchange (EDI) is one of the popular blocks in the inter-company data exchange activity.

#### Process Automation

All kinds of remote procurement systems and JIT systems qualify for this process. Typically, when companies tend to have long and stable contracts with their suppliers, the information systems can be programmed to automatically release purchase orders on the vendor. It can also be programmed to receive the approximate date of deliveries from

the supplier. The whole process goes on in a routine fashion without any sort of human interface. This reduces a lot of repetitive tasks of your procurement departments.

The other areas where you can typically consider automation is in the area of attendance monitoring / swipe card integration system. Since your billing and the quality of service is reflected in the attendance of your employees at customer locations, this can be a vital differentiator in your approach to service to your customer.

#### Business to Business Aggregation

When information flows between two or more businesses, then the concept is popularly known as **Business to Business Aggregation**. B2B aggregation mostly happens through portal sites.

These portal sites are intermediaries that make business talk to each other, establish trade agreements and finally integrate their trading processes.



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### Technology Issues

#### Technology Challenges

While integration is necessarily a good thing to happen, there are specific technological challenges that hinder smooth integration.

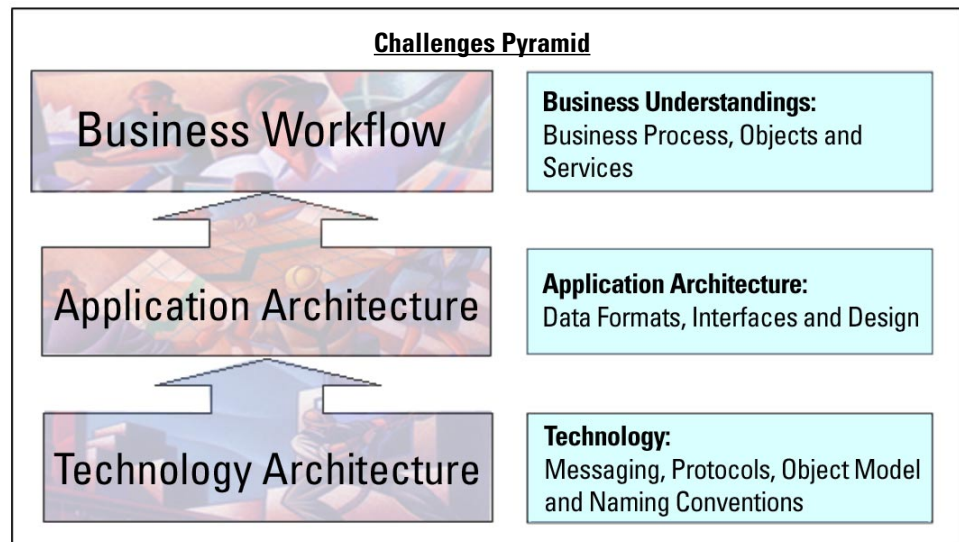
While the perception of integration often seems to revolve around technology, experience suggests that aligning business workflows is where most difficult problems arise. This is where integration fails in real life.

### Challenges Pyramid

Among the issues listed above, the main areas one need to focus during implementation will be:

1. Incompatible protocols;
2. Incompatible data formats;
3. Improper Business Workflow Integration;
4. Error Handling Mechanism between applications;

To get over these problems, EAI Integrators prefer use of Integration Frameworks.





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**Integration Framework**  
**Integration Frameworks** are the preferred mode of bringing together applications. Frameworks are designed to provide the skeleton to make each application talk to another. Microsoft's .NET Framework is one of the popular Frameworks today.

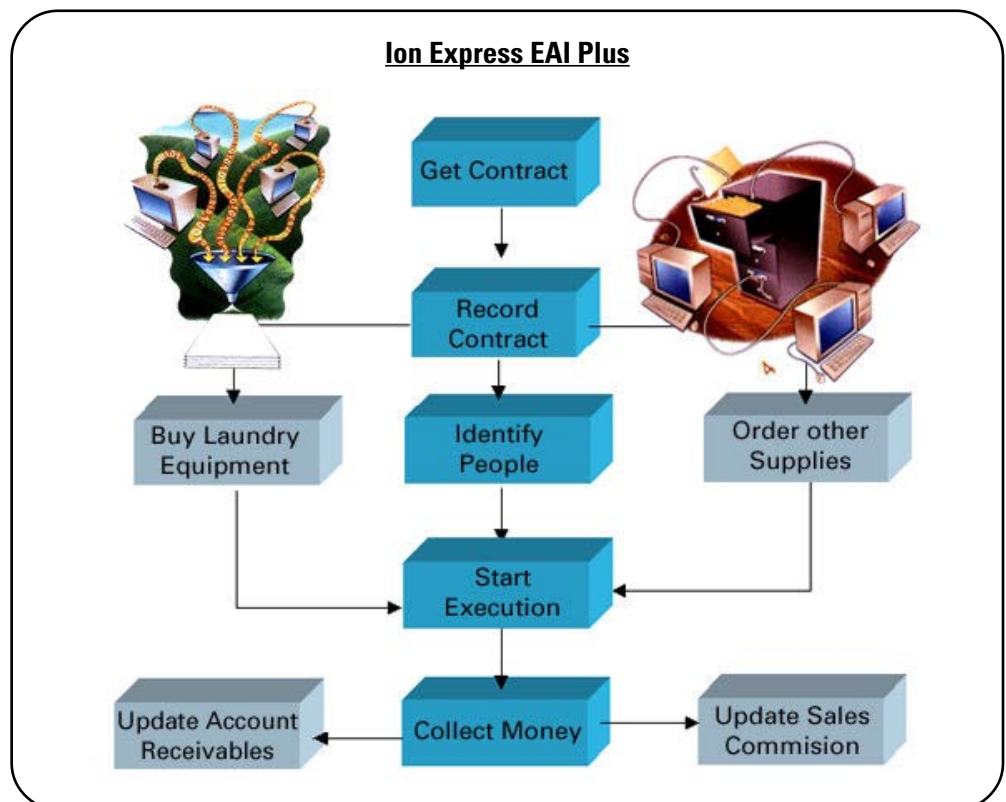
you a fair idea on usage of .NET Framework in integrating your applications, as also, IonIdea's strengths in the technology.

### **IonExpress EAI Plus**

#### Development Methodology

The white paper on 'IonIdea capabilities in Microsoft.NET' will give

IonIdea uses 'IonExpress', a mature, home grown development





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methodology to execute projects. This methodology covers the entire gamut of the software life cycle.

Ion Express meets the complete requirements of ISO 9001 – 1994 software development standards. It also meets all the KPAs required for SEI – CMM Level 3 certification. Our Bangalore facility is ISO 9001 certified and is moving towards CMM Level 4 certification.

However, for Enterprise Application Integration (EAI) projects, we have modified the methodology to include another phase in the life cycle. We call this EAI specific methodology – ‘**IonExpress EAI Plus**’.

IonExpress EAI Plus covers all the risks commonly encountered in an EAI project. The methodology covers: Ion Express EAI Plus

Please read our enclosed white paper on ‘Ion Express’ to get a complete idea of our software development methodology.

### Engagement Methodology

Ionidea is a Virginia based company. We have development centers in two other countries:

- Bangalore, India;
- Simferopol, Ukraine;

We offer you three development models.

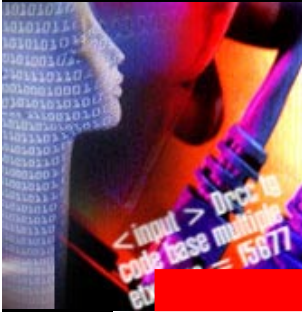
- On-site Development;
- Hybrid Development;
- Off-shore Development;

### On-site Development:

Our development team works at your facility as a part of your integration team. We undertake the EAI projects either as a turnkey solution or depute our experienced consultants to work with your teams.

As a turnkey solution, the entire project management and quality assurance becomes our responsibility.





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### Hybrid Development:

This is the ideal development model. Our team would initially work closely with the Sodexo Team and understand the business process. We will provide you an '**Executive Assessment**' to help you identify both the technologies and tools. We will then provide a comprehensive architecture of the complete solution. The Acceptance Quality Standards are defined initially.

Once the documentation is complete, the entire work is sent to one of our dedicated teams at an off-shore facility. The team will convert the documentation into code and test the output. The same will be sent to the on-site team / coordinator for installation, implementation and training.

You gain the benefit of cost savings, as well as exercise control over the project.

### Off-shore Development:

In case you hire an external consultant to help you define requirements, you can use the IonIdea Facility to develop quality solutions at a fraction of the cost.

### **IonIdea & .NET**

IonIdea embraced .NET very early in its life cycle. The Bangalore Facility of IonIdea hosts a '**Center for Excellence on Dot NET**'. The Center focuses on integration related projects. IonIdea is also re-engineering its product in the Human Resource Domain, iCare using the .NET Framework.

The .NET team at the moment has expertise in developing and managing projects using .NET components and classes. The team also has core strength in using protocols like SOAP.

A comprehensive detail about 'IonIdea capabilities in



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Microsoft.NET' is in the attached white paper.

### **Ionidea and Application Integration**

Ion Idea's area of core competency is in Enterprise Integration. We have traditionally been very strong in the intermediate tier of web development with strong teams on Forte, Web Logic, Web Sphere and Vitria. Our consultants would help you seamlessly integrate your business process with existing systems.

We have executed a number of integration projects for our Fortune 1000 customers. IonIdea Bangalore, India Facility is also designing the '**IonIdea Integration Framework**'.

The Framework has a vast repository of re-usable components

and wrappers. Our efforts in this direction will aid us in completing your Integration Projects faster and at very attractive man hour considerations.

### **Conclusion**

IonIdea Center for Excellence in .NET Technology ensures the technical bandwidth to handle your Application Integration Projects. The technical maturity of our process and the experience of our teams dramatically reduce risks of over shooting budgets and time frames. The staged delivery process and phase evaluation procedures ensure that you exercise control over the progress of the project. A judicious mixture of on-site and off-shore project teams gives you a better return on your dollar.