

By Sergio C. Carbone

Applying What's New

Presented by

Sergio C. Carbone

Of

SC Carbone, Inc.

The computer systems innovation group

Introduction

- Welcome to this evening's presentation by Sergio C. Carbone of SC Carbone, Inc., a computer system consulting company that is the source for innovative solutions to real business challenges.
- The last time I was with you, we talked about Java Servlets, and it is nice to be back to talk with you again.
- Tonight we will be talking about emerging technologies.
- Even saying the words 'emerging technologies' brings visions of new subjects, changes in approach, and endless hours sorting through new information.
- Tonight will be different, my intent is to leave you feeling inspired, not overwhelmed.

Emerging Technologies

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Technologies and The Crystal Ball

What Is New In Technology

- In short, there is an overwhelming amount of new technology.
- There are new types of communication: 'snailing' into your neighborhood is DSL, Cable, Fixed-wireless, Mobile, and DirectPC.
- New operating systems such as XP, environments such as .NET, and implementations such as XML, have developers signing up for a new life of training.
- There are new tools, new standards, new language formulations, and new powerful devises to occupy our time or interrupt us at our favorite restaurant.
- The government is giving us new legislation, and we have new economic conditions that are combining to influence the adoption of new business rules.
- This all adds up to plenty of new concern about wasting our efforts.
- What is new is the same old question.
- Which of the 'new waves' should we ride on?
- What approach will give our company the best value and advantage?
- Before we reach the point where we decide our company's future with a deck of Tarot cards, let's look at what is applicable to business.

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What Is Worth Our Effort

What Is Applicable To Business

- There are a lot of new technologies, but should we rush to use them?
- There are buckets of new, but insignificant, technology brought to market each year.
- We are often on the lookout for the 'next', and we look at languages and environments as silver-bullets.
- Business moves and shifts based on what's new.
- Often business suffers because of these decisions.
- When we are looking at what is worth our efforts, we may want to include ideas outside simply new technologies.
- Technology is not as great as the effect technology brings about.
- In today's marketplace, business is focusing on needs not wants.
- We need to look at technology based on its applicability to our needs, because it is in the application that value is gained.
- Often we miss surrounding conditions that enable innovative implementations.
- This happens because business practices are controlled outside of IT, and we may avoid attempting to influence those areas.
- Ask: can we use what's new to add revenue or reduce costs.
- Evidencing direct impact is a far easier 'sell' than sheer technology appeal.
- Making business more convenient is our purpose, and one thing we can do is to make business more fluid.
- Electronic contracts will help accomplish this.

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Electronic Contracts

New Abilities Through Legislation

- An electronic contract is a contract that is recorded without paper.
- Electronic contracts will enable business to take place without direct contact.
- Although direct contact, the human touch, is important, it sometimes stifles us.
- Think of the time and effort you may spend because you need to sign a document; to some people, it is inconvenient.
- In the past, people have been leery about paperless transactions. Many people request a receipt at the gas pump just to get the chance to throw it directly in the trash.
- Businesses also avoided electronic contracts because they felt unprotected by the law.
- There was no consistent treatment of electronic contracts, and in each state the validity of electronic contracts and consumer protection mechanisms were viewed differently.
- Because of this inconsistent protection in the eyes of the law, electronic contracts were often scoffed and held in distrust by the public.
- Today things have changed; new legislation, the Electronic Signatures in Global and National Commerce Act, has been put in place that makes electronic contracts a reality.
- The public is more exposed to technology and consumer protection exists for electronic contracts.
- Today electronic contracts open new doors and give businesses opportunities they have not had before.



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Electronic Contracts

Overview

- The Electronic Signatures in Global and National Commerce Act, also known as the E-Sign Act, provides a baseline standard for electronic contracts.
- It is designed to be flexible, and leaves the details and the application of technology for electronic contracts to industry.
- The Act does not endorse any technology, but does lay the basic requirements to be followed.
- Either party must have the option to require paper contracts at any point of the transaction. Also, the contract's meaning must be preserved and be reproducible.
- The electronic signature used in the contract can be implemented with any system that satisfies the parties' assurance of identity. The law defines an electronic signature as an electronic sound, symbol, or process.
- Regardless of the methodology selected by users of electronic signatures, each document will retain the same legal effect, validity and enforceability of the traditional signature.
- The Act does not regulate some types of contracts such as wills, domestic law, and real-property transactions.
- You should review the Act with your legal resources to determine the specific opportunities and concerns for your business.

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Enter XML

Refresher

- Extensible Markup Language XML is a way to format your data so that it is readable by a standard processor such as MS Internet Explorer.
- You can think of XML as a markup language like HTML, but XML is used to both describe data and contain the data values, not to build a Web page.
- As the author of an XML document or file, you define the tags for your data.
- XML provides a structural representation of data that can be implemented broadly and is easy to deploy.
- XML is becoming the vehicle for structured data on the Web, fully complementing HTML, which is used to present the data.
- By breaking structured data away from presentation, Web developers can begin to build the next generation of Web applications.
- XML will enable your Web pages with content that is intelligent and more dynamic.
- Also, since data is exchanged in the XML format, it can be easily merged from different sources. The ability to search multiple, incompatible databases is virtually impossible today. XML enables structured data from different sources to be easily combined.

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Enter XML

XML And Electronic Contracts

- One issue with electronic contracts is the ability to use the information in the contract in other business systems.
- If we look at electronic contracts as images of a document or large blocks of text, they have little value outside of paper and storage savings.
- XML can give these documents more power and value.
- Because XML is separate from the document 'image', XML will thoroughly define the information that makes the meaning of the contract.
- For instance, XML can be used to describe information about the document, or it can be used to describe data contained in business rules or objects in an electronic-commerce transaction, such as contracts, invoices, purchase orders, and order forms.
- This makes XML the solution for compelling applications.
- For instance, XML will provide more meaningful searches. For example, allowing a search on contracts <u>contingent on</u> insurance, rather than contracts <u>about</u> insurance.
- By contrast, searches using present methods will yield both types of contracts mixed together.
- XML will enable you to create data sources that can be accessed in a number of different ways, for a number of different purposes, making interoperability between applications possible.
- Without XML, search applications need to understand the schema of each database. This is virtually impossible because every database describes its data differently.



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Benefits

The Impact Of Electronic Contracts

- The business case for electronic contracts is growing.
- Electronic contracts will generate more convenience in transactions that would normally need contact.
- Electronic contracts will allow consumers to complete transactions at the convenience of their schedules.
- This will decrease the wait many consumers experience when they 'walk in' to complete their transactions.
- For business, electronic contracts will allow low-overhead access to contracted services and products.
- By reducing the amount of contact needed, electronic contracts will allow business to focus their sales staff on more profitable transactions.
- Many industries such as, auto sales, insurance, homebuilders and construction, banking, and even state and local government, can immediately leverage electronic contracts.

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Conclusion

To Review Some Key Points

- There are many technologies emerging to win our interest, but we need to consider the applicability of them to our business.
- The value is in what we can gain through the use of technology.
- Perhaps today's best value for business is in the application of technology to take advantage of other influences, such as legislation like the E-Sign Act.
- The market is readying for electronic contracts, and we need to start thinking about how we could enhance our business with them.
- Electronic contracts will bring a new convenience to both consumers and businesses. It will enable business to utilize its staff more efficiently.
- The E-Sign Act has given commerce new opportunities and some flexible guidelines that fit the needs of many industries.
- A big advantage of electronic contracts is the ability to have the contracts' information separated from the image of the contract. This separation allows the contracts' information to be used in many other ways.
- XML is an important part of providing the needed separation and developing intelligent and valuable electronic contract systems.



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Final Points

Getting Started

- It is important to win your advantage, and be to market early.
- Understanding your business is the first step to making electronic contract systems work.
- Often organizing a project is the hardest part, and companies may feel reassured with a technology partner.
- You can get help when you need it. There are many opportunities for assistance in developing your systems, mentoring your organization, and training your staff.
- The key is to start.

Thank You

- Thank you for the opportunity to talk with you today. I hope you have found great value in this presentation. It will be available on-line at http://www.sccarbone.com/articles.
- If you have any questions, or need any further information or assistance, please feel to contact me.

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