September 11, 2000

Secretary
Federal Trade Commission
Room H-159
600 Pennsylvania Ave., N.W.
Washington, D.C. 20580

Re: High-Tech Warranty Project --Comment, P994413

Dear Secretary:

1. In response to the Federal Trade Commission's ("FTC") Public Forum on "Warranty Protection for High-Tech Products and Services" published in the Federal Register on May 11, 2000, and its request for "academic papers and public comment" on issues presented in the Federal Register notice, Software & Information Industry Association ("SIIA") files the following comments on behalf of its members.

A. General Comments and Introduction

2. SIIA is the principal trade association of the software and information industry and represents over 1,000 high-tech companies that develop and market software and electronic content for business, education, consumers, the Internet, and entertainment. SIIA's membership is comprised of large and small software companies, such as Novell, Sun Microsystems and Emigre; e-businesses, such as America Online, IBM and Travelocity; information companies, such as NASDAQ, Reed Elsevier Inc. and SilverPlatter, as well as many other large and small traditional and electronic commerce companies having various business models and interests.

3. SIIA members represent a wide range of diverse business interests. Many of our members are intellectual property owners, resellers and/or publishers of information products, providers in information services, and consumers of content and information products and services. While our members' interests may be wide-ranging and diverse, they all have at least

one thing in common — they are all involved in transactions involving software and information products as licensors or licensees, sellers or buyers, or providers or consumers. It should therefore come as no surprise that SIIA and its members have an interest — albeit some more than others — in issues relating to the licensing and sale of software and information products and services and the laws and regulations governing these transactions. It follows that, SIIA and our members are extremely interested in the FTC's request for papers and written comments relating to warranty protection for high-tech products and services.

B. Consumer Benefits From Electronic Commerce and High-Tech Products and Services Dramatically Alter the Relationship Between Consumers and Providers

4. The Internet has permanently changed the relationship between consumers and the software and information industry. Electronic commerce has provided consumers with more options, more alternatives and more opportunities than ever before. The richness and inherent value of electronic commerce and high-tech products to consumers is derived from the wide availability of software and digital information and the ease by which these products and services can be realized by consumers using new high-tech products. For consumers of software and information products, electronic commerce provides a robust new delivery channel for software and digital content. By using the Internet to deliver digital content (such as software or news), consumers can take advantage of the lower transaction costs, simplified delivery systems, direct interaction with the provider, and minimal time-to-market.

5. For consumers, electronic commerce provides opportunities for unprecedented choice, convenience and access to creative content and new high-tech products that simplify their lives. Today's consumers benefit from access to a range of software and information products — the likes of which have never been seen before. Business, entertainment, educational and many other types of software; economic and statistical data; collections of laws and court decisions; health and medical information; stock and commodity market quotes; directories of names and addresses; geographical and meteorological information; catalogs; magazines and newspapers are just a few of the software and information products routinely available to consumers.

6. No longer limited by geography or unwieldy hardware, consumers can conduct transactions online anytime, anywhere — comparing prices, quality and service from several providers. Consumers are no longer limited to physically visiting "main street" or "big-box" retailers. Instead, they are able to choose from products and services from companies large and small, located all over the world, without leaving their homes. Consumers can conveniently purchase the latest business application software at an online store from their homes or view stock prices from their PCS as they stroll down the street. In fact, according to a report by the Department of Commerce they are doing just that.[1] The Department of Commerce reports that in 1997 (the last year for which numbers are available), "[e]lectronic shopping and mail-order houses sold $22.9 billion in computer hardware, software and supplies . . . *more than any other types of retail business*." (emphasis added)[2]

7. Tangible points of comparison between retailers, which now can be automatically aggregated by software buying agents in seconds, include more than selection and price. Shipping costs, return policies, privacy practices and personalization of products are examples of tangible points of comparison.

8. Equally as important are intangible points of comparison, specifically the customer experience. Everything from the look and feel of the home page to the shopping and buying process defines this experience. It encompasses everything the customer sees, clicks, reads, or otherwise interacts with. Companies can reach new customers and provide an unparalleled level of personalized service.

9. Central to the creation of a positive, unique and personalized shopping experience are technologies employed to remember customer preferences. New technologies are making a positive customer experience possible for even the earliest-stage companies. The integration of Customer Relationship Management software into Web sites, the facilitation of customer

[1] *See* Commerce News, "Electronic Shopping and Mail-Order Houses Account for Most Computer Hardware and Software Sales, Census Bureau Reports," (Aug. 11, 2000)

[2] *Id.*

accounts with powerful database software, the utilization of Web content management databases and other tools allow consumers to create a personal interface that give consumers more power than ever before.

10. Raising customer retention rates means focusing on long-term relationships. Many providers customize their business models for returning customers to particular individual preferences or needs, anticipating the next purchase or suggesting complementary products. Tracked preferences help expedite, and sometimes fully automate, the consumer process while offering targeted marketing and discounts. The customer experience is the key to survival of the software and information industry.

11. Of course, one cannot overlook the most powerful and fundamental advantage of today's consumers: the ability to choose one software or information provider over another within seconds. And if a satisfactory transaction cannot be concluded, other alternatives, such as online auctions and reverse auctions, are available to consumers that directly compete with many traditional software and information providers.

12. Even with huge potential markets, attracting and retaining customers is more expensive than ever. With per-customer acquisition costs ranging from $29 for Amazon.com to more than $250 for some online brokerages, keeping customers is as important as attracting them.[3] These high costs underscore the importance of a traditional retail adage — the best customer is the one you already have.

13. Long-term relationships are based on quality of service. While price comparisons are important to consumers, price is not dispositive in making purchasing decisions. Less than half of Internet buyers select a retailer based on price alone.[4] More often, customers select e-businesses whose sites they had visited previously. Consequently, if a provider is not willing to

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[3] about.com, "Internet Customer Acquisition Costs," published December, 1999. Available at http://internet.about.com

[4] Solomon, Melissa, "Service Beats Price on the Web, Study Finds," The Industry Standard, June 14, 2000. Available at http://www.thestandard.com.

provide quality products or service and is not willing to support and warrant its product or service, regardless of legal requirements regarding disclaimer of warranties, that company will not be in business for very long. With one click of the mouse, the consumer will simply find a company who is willing to provide quality, value and dependable services.

14. Consumers will be able to take advantage of new technologies and business models only to the extent that the laws does not inhibit the creation and use of new technologies and business models. If the law creates undue burdens on providers that raise transactional costs, without producing any corresponding tangible benefits to consumers, in the end, only the consumers' interests will be harmed. This is especially true where the legal requirement on the provider is one that the consumer cares little about or has the ability to secure in the absence of any legal requirement.

15. For instance, the average consumer of software and informational products does not decide whether to buy a product or service based on warranties contained in a contract. Rather the consumer will ultimately decide whether to purchase a product or service based on factors such as price, compatibility, or brand loyalty.[5] Accordingly, deliberative assent to disclaimers of certain warranties could be obtained in an average transaction, but only by incurring the sorts of transactional costs that shrink wrap and click-through agreements are designed to reduce.

16. Thus, there is relatively little to be gained by consumers from a law imposing deliberative assent to warranty disclaimers, because deliberative rather than presumed assent likely does not benefit the average consumer. Thus, requiring evidence of deliberative assent would increase transactional costs without yielding corresponding benefits.

17. Moreover, as explained above, educated consumers wield so much more power today because of new technologies and business models that certain legal requirements,

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[5] See Maureen A. O'Rourke, Drawing the Boundary Between Copyright and Contract: Copyright Preemption if Software License Terms, 45 Duke L.J. 479, 516 (1995) (stating that it "is questionable whether the end user wishes to purchase anything more than the functionality that is obtained by running the object code.")

especially those relating to warranties, may actually work to their disadvantage. For example, the origins and the continued existence of the open source code movement is dependent upon the abilities of those who share their code with others to disclaim warranties. People would stop sharing code if they thought they could be sued by the recipient of the code. Bruce Perens, an OSI advocate was quoted as saying "[i]f free software authors lose the right to disclaim all warranties and find themselves getting sued over the performance of the programs they've written, they'll stop contributing free software to the world." This is just one case where the ability to disclaim warranties clearly benefits consumers.

C. Government Intervention and Regulation of On-line and Off-line Commercial Transactions Should be Minimized and Should be Accomplished in Conjunction With Relevant Industry Sectors

18. Government must approach regulation of the Internet and transactions in goods flowing over the Internet with skepticism and caution. Given the rapid change in technology and business models, many feel it is inappropriate for the government to dictate which technologies and models will succeed and which will not. The online marketplace is emerging with incredible speed, creativity and variety — a rush to regulate would only serve to sharply curtail the development of this attractive new market. Moreover, the introduction of a new technology and business models should not be impeded by the adoption of policies that fail to take into account emerging capabilities. As importantly, because governments are typically slow to respond — especially when compared to the Internet — only the most carefully constructed regulations should be considered.

19. In certain areas, it may be appropriate for government agreements to legislate or regulate in order to facilitate electronic commerce and protect consumers. In these cases, it is essential that governments establish a predictable and simple legal environment based on a decentralized, contractual model of law rather than one based on top-down regulation. Depending on the issue, this may likely require state involvement in conjunction with the federal

government. Where government intervention is necessary to facilitate electronic commerce, its goal should be to support and encourage transactions in commercial goods and services, adequately and effectively protect intellectual property, ensure competition and privacy, prevent fraud, and foster transparency.

20. Fortunately for consumers, market dynamics and the law are already working to ensure that the only business practices that will survive in the long-term are those that balance convenience, price and consumer protections. In the coming months and years, as consumers become more educated and aware of their choices, businesses that do not effectively respond to online consumer preferences and interests will simply fade away.

21. Industry must devise methods to empower consumers to make informed decisions about the conditions under which they are willing to do business. Consumer protection does not cease on the Internet; for business, developing and maintaining customer confidence and satisfaction becomes even more important because market competition is fierce.

22. Governments should work collectively alongside industry on Internet-related issues, such as consumer protection and warranties, while recognizing that the global nature of the medium and the rate of change within the market will make the imposition of national law difficult to apply in a rational manner. The government must instead educate and empower consumers while working with industry to develop common approaches to shared concerns.

23. It is also critical that governments understand that the policies they establish cannot and should not be created in a vacuum. It is impossible to separate high-tech policies from any other market segment. Because technology has become so pervasive in our own lives, we must recognize that technology policy has become equally pervasive in all of our public policy discussions.

24. For these reasons, it is important that the scope of the FTC's initial public forum on "Warranty Protection for High-Tech Products and Services" focus primarily on the use and effect of warranties for software and information products and services and a review of the

relevant law in this area. The forum should not be allowed to evolve in to an open-ended discussion of the relationship between software and information vendors, intermediaries, customers and other parties or the manner in which software and information products and services are created, distributed and marketed. Nor should this forum be used as an opportunity to "re-open" discussions on the Uniform Computer Information Transactions Act ("UCITA").

25. As with all well-considered laws, UCITA represents a compromise among the interests of numerous interested parties. After years of debate and discussion of some very complex and intertwined issues, a compromise has been reached on the final text of UCITA. The compromise was agreed to by all the interested parties as a means of creating a balanced and workable statute. It would be inappropriate for this compromise to be re-opened in a different forum largely ignoring or recreating prior discussion, debates and concessions that have taken place over the years.

26. Given this scope of the FTC public forum, SIIA congratulates the FTC on its forward-looking and open-minded approach to the very important business and consumer protection issues and looks forward to working with the FTC in the context of this public forum.

D. The Importance of UCITA to Providers and Consumers

27. Intangible digital products — such as computer software and information — are fundamentally different than other more traditional products. As a result, transactions involving these products are usually executed through licensing agreements rather than sales contracts. Because of the unique manner in which digital products are disseminated to businesses, nonprofit institutions and consumers it is necessary to treat these agreements differently than more traditional agreements.

28. For years, SIIA and its predecessor organizations[6] have played a leading role on issues relating to the licensing of software and information products. SIIA has participated in the formulation of UCITA from the earliest days of the Drafting Committee established by the National Conference of Commissioners on Uniform State Laws ("NCCUSL").

29. SIIA and its members support enactment of UCITA because it is crucial to laying the groundwork to expand electronic commerce, by:

- updating the commercial code for the 21st century;
- establishing a national standard for default contract and licensing rules for digital delivery of vital software and information;
- eliminating uncertainty and variances among common law interpretations for the sale of intangible goods;
- adopting laws expressly written for computer information consistent with fundamental and well-settled principles of U.S. contract law; and
- providing guidance to parties making electronic contracts.

30. In addition, by updating and standardizing the contracting process for computer information, UCITA enhances the ability of technology companies to create new and innovative products for consumers. UCITA helps customers get the technology they want — quickly, conveniently, reliably and at the lowest price possible.

31. UCITA achieves these goals by codifying established and workable business practices. The discussions and debates surrounding the formulation of the UCITA involved a

[6] SIIA was formed on January 1, 1999, as a result of a merger between the Software Publishers Association ("SPA") and the Information Industry Association ("IIA"). Information on SIIA and its wide range of activities can be found at www.siia.net.

wide range of software and information provider and users, including those organizations, such as many SIIA members, who are both licensors and licensees of digital products and services. The approach taken in establishing the ground rules for licenses and contracts under UCITA are far from radical; rather, they are both practical and sensible.

32. The provisions of UCITA are also consistent with well established principles of contract law. At its heart, UCITA embodies the well-established principle of freedom of contract, subject to public policy considerations. Consistent with this principle, UCITA allows parties the freedom to structure an agreement as they desire, with some exception — notably, provisions relating to consumer protections. It recognizes that contract laws should not be unduly burdensome and that marketplace forces and the parties specifications should be the primary determining factor.

33. Today, most large transactions involving business-to-business sales and licenses of software and information are the result of detailed negotiations, and UCITA will establish a good framework for such negotiations. The same situation is true for transactions involving sales and licenses to large nonprofit institutions, including most library and university systems. For transactions involving small or medium sized businesses and institutions, UCITA will reduce costs for contract formation and attorneys' fees, since the contracting parties can rely on the Act's provisions should an important clause be overlooked or not clearly understood and later be subject to arbitration, further negotiation or litigation. In regard to the licensing or sale of intangible goods to consumers, UCITA will assure faster delivery of the products and services increasingly in demand in the digital world, since both consumers and suppliers will have workable and understandable rules by which to operate.

34. SIIA supports the principle that freedom of contract must be preserved on the Internet, regardless of whether the agreement was reached electronically or not. The rapid evolution of the Internet and the dramatic increase in electronic commerce highlight the need for UCITA, because UCITA embraces freedom of contract as its goal and seeks to employ a methodology that lowers transaction costs while preserving bargaining flexibility.

35. Lastly, and most significantly in regards to this forum, UCITA preserves existing state consumer protection statutes and regulations and does not alter federal consumer law. It applies new rules only where change is needed to facilitate electronic commerce. UCITA preserves or extends to information the consumer protections that exist under the Uniform Commercial Code ("UCC") Article 2 for the sale of goods and adds new protections. In fact, a consumer is better off under UCITA than under existing Article 2 law for the sale of goods or current law for sale of services.

36. UCITA adopts existing warranties from UCC Article 2 and creates new warranties specific to computer information. Specifically, UCITA recognizes:

(1) express warranties that are part of the basis of bargain under the same standard as Article 2. In fact, UCITA goes one step further in protecting consumers by explicitly indicating that an express warranty can be created by advertising. In addition, it also retains current law as to published informational content.

(2) an implied warranty of merchantability that computer software will be fit for the ordinary purposes for which it is used. In this regard, UCITA parallels the implied warranty of merchantability in Article 2, applying it to software instead of goods to which Article 2 applies.

(3) an implied warranty of fitness for a purpose that the product will meet the consumer's needs. UCITA applies the same rule as existing Article 2 except for cases that involve services contract obligations.

(4) an implied warranty of non-infringement that is wholly consistent with Article 2. UCITA goes beyond Article 2 by providing additional protections to consumers who provide specifications to the software or information provider.[7]

[7] There is no warranty of good title in UCITA because it is unnecessary. With software and information products, licensors often do not themselves have title to the product (since they may be also licensees).

(5) an implied warranty of quiet enjoyment that is consistent with Article 2A on leases which provides that the software and information vendor will not interfere with consumer's enjoyment of the product or service. Notably, Article 2 does not recognize this warranty.

(6) an implied warranty of system integration that a group of elements will function as a system. This is a new warranty that is not recognized by Article 2.

(7) an implied warranty of data accuracy that the information in an information product will be accurate. This is a new warranty that is not recognized by Article 2.

37. More specifically, UCITA updates and supplements necessary and appropriate safeguards for consumers by including: uniform rules on unconscionability that require more informative language of disclaimer than does current Article 2; an electronic error defense; a non-disclaimable, cost-free statutory refund, coupled with restoration costs; and an extension of certain consumer protections to businesses (large and small) through "mass market license" provisions. At the same time, it leaves in place substantive provisions of numerous state consumer protection statutes.

38. Most states have consumer protection statutes specifically designed to safeguard consumer rights. UCITA does not overturn these statutes. There are also additional consumer protections written into various commercial laws. UCITA is a commercial law, and it both retains and expands the traditional consumer protections found in commercial law.

E. Warranties and Their Relationship To Risk Allocation Management

39. While the FTC's forum focuses on "warranty protection," we think it is instructive to define what is truly meant by the phrase. In our view, the phrase "warranty protection" is somewhat of a misnomer. As a practical matter, a warranty is nothing more than a provision in an agreement that obliges one party to that agreement to take certain actions, such as paying

money, accepting return of a product, repairing a product etc., upon the occurrence of certain events. By using the term "warranty protection" without first defining it, we run the risk of mischaracterizing the focus of the discussion as one relating more to consumer security than performance obligations. Thus, for the purposes of this forum, it likely makes sense to focus instead on the obligations on a party to an agreement that will follow if particular events occur, rather than on any a false sense of security that a warranty might provide to consumers. If warranties are thought of in this matter, it becomes clear that issues involving warranties relating to software and information product agreements have more to do with risk management (*i.e.*, who should bear the burden of performance) than to consumer protection.

40. While some agreements for software and information products may include an "as is warranty," this appears to be the exception rather than the rule. By the same token, few software and information providers wish to be insurers of their customers' businesses. After all, a customer may use software in a manner — whether anticipated or unanticipated by the provider — that could place the provider's entire business at risk if a problem with the provider's product occurs. For example, should a small company that developed a standard library of number-crunching functions that was incorporated into the CAD software used to design an aircraft be liable for all the ensuing financial and emotional damage that results when the aircraft, being fully-loaded with passengers, crashes into a skyscraper at rush hour and it is determined that the crash was caused by a defect in the number-crunching software that resulted in the design of the aircraft being defective. Clearly, the typical software or information provider has no intent to subject itself to this level of risk. And if the law retarded an appropriate allocation of the risk between the relevant parties, it would be exceedingly difficult — if not impossible — to find a software provider who was willing to license or sell its software for aircraft design or similar potential hazardous activities.

41. There are numerous other examples (which are perhaps less dramatic but just as significant) that demonstrate the importance of being able to allocate risk between provider and consumer through appropriately tailored warranty disclaimers. For example, because patent applications are held in secrecy until they are issued (or, in certain cases, up until eighteen months after they are first filed), a provider cannot possibly know whether a third-party patent

might issue after an agreement is signed. Nevertheless, if it is not possible for the implied warranty of non-infringement to be disclaimed, and the consumer's particular use of the licensed software is found to infringe the patented software, the provider may be held liable for patent infringement for the consumer's use of the software. This is of particular concern in the high-tech area where the damages awarded for patent infringement may exponentially exceed any payments received from a consumer for the software license. It, therefore, becomes important for the provider to be able to disclaim the implied warranty of non-infringement.

42. A software provider is in the business of selling or licensing software, not the business of selling insurance. The provider's pricing of the software typically reflects that fact. Accordingly, the agreement between provider and consumer will normally limit the risk that the provider must assume. On the other hand, the typical consumer wants some level of comfort that the provider will live up to its obligations. Therefore, it is clear that a balance regarding the allocation of risk is necessary.

43. The balance to be struck does not come without a cost, however. Just as one cannot change the scope of rights granted without altering the balance between consumers and providers, one cannot also change the risk associated with investment and dissemination of intellectual property without changing investment behavior in that property. As explained above, this change in behavior likely comes at the expense of consumers because it results in increased transactional costs without yielding corresponding consumer benefits.

44. Many who contest the legitimacy of shrink-wrap and click-wrap agreements point to the alleged adhesive nature of such agreements, and particularly those used in the mass market, and fail to recognize the significance of proper risk allocation to these agreements. The chance that any term contained in these agreements will be important enough to an average consumer to warrant prolonged study, or even cursory review, is trivial. It is therefore clear that these agreements should be recognized as contracts, particularly where doctrines such as unconscionability, unfair surprise and other consumer protections exist to police abuse.

45. Licensing experts have suggested that if every consumer who purchased software in a retail outlet was met at the checkout register with a sign informing the consumer of his warranties, and asking him to initial the card, the average purchaser almost certainly would comply. In this example, quite clearly there would be little room to argue that assent had been given for purposes of contract formation. The same would be true of the on-line equivalent of this procedure, in which a licensee is shown a screen of contract terms and required to click on an icon to proceed with the transaction. In each of these cases, consumers are faced with a take-it-or-leave-it choice. Therefore, consumers lose little if anything from the lack of negotiation of shrink-wrap agreements, for presumed rather than deliberative consent likely does the average consumer no harm. On average, consumers would probably assent to limitations on their warranties, their assent would be rational, and requiring evidence of deliberative assent therefore would increase transaction costs without yielding corresponding benefits that are relevant to federal policy concerns.

F. The Unique Nature of Software and Information Products and Services and the Rapidly Evolving Road that Lies Ahead

46. Computer software and information products and services are unlike any other tangible or intangible goods and services. It is not possible to broadly characterize, categorize or classify computer software and information products and services because of the diversity of the products and services themselves and because of the variety and ever-shifting ways in which these products are marketed. There is no one-size-fits-all solution here. And, as history has shown us, any attempts to do so, have fallen short.

47. The laws governing the sales of goods are relatively clear. However, because of the unique nature of computer software and information products and services existing commercial law governing transactions in these products and services — which clearly do not fall within the classification of "sale of goods" under Article 2 of the UCC — is inconsistent and complex. Attempts to shoehorn computer software and information products into Article 2 have failed miserably because of the unique way that these products are packaged and licensed to

consumers. Future attempts that fail to acknowledge the unique challenge presented by these products and services are doomed to repeat history.

48. For instance, the Magnuson-Moss Warranty Act and the associated FTC regulations deal with warranties offered to consumers in respect of "consumer products," defined as "any tangible personal property which is distributed in commerce and which is normally used for personal, family or household purposes." While the legislative history of the Act and the regulations seem to indicate that ambiguities are to be resolved in favor of coverage, on its face, it does not appear that the Magnuson-Moss Act would apply to software and information products given that these products are by definition not "tangible" property. This appears to be bolstered by the courts, as we have been unable to unearth any case in which the Act has been applied to software.

49. Nevertheless, it would appear that the issue of whether the Act applies or does not apply to software is a distinction without a difference. Given the unique nature of software and information products and services, the way they are marketed, and the relevant warranties, UCITA would apply the same if not greater consumer protections than those afforded by the Magnuson-Moss Act. Taking into account the present state of electronic commerce and our crystal-ball view of the future, is it important that policy makers and policies themselves not get stuck in time.

50. The new economy and increased complexity by which software and information products will be created and distributed requires creative and unique policy solutions. A one-size-fits-all solution will only serve to hinder electronic commerce and consumer benefits from new software and information products and services. With the advent of the Information Age, billions of dollars in commerce are conducted in purchasing and using computer software and information products and services. Current and reliable information is the fuel powering the digital economy.

51. Despite this unbridled success, the software and information industry finds itself in the midst of an major evolution.[8] Increasing bandwidth and speed are providing the ability of software publishers to host and manage applications for consumers, removing them from the desktop or local server. The result is a shift in the business model of most software companies from traditional shrink-wrap products to software as a service.

52. Dozens of companies are currently engaged in one of the most creative and competitive races in the history of the software and information industries. The quest to become one of the dominant providers of software and information as a service is on. As software and information companies create new partnerships and technologies to deliver their vision of software and information as a service, the concept is assuming a variety of forms. The emerging marketplace is inundated with acronyms each representing a slightly different approach — application service provider ("ASP"), Internet business service ("IBS"), business service provider ("BSP"), solutions service provider ("SSP") and more.[9]

53. Software and information publishers are approaching the market in a variety of ways. Some developers adapt current products or incorporate ASP elements into existing product lines. Some re-tool their entire product lines — albeit in stages — to create new products built for the ASP model, while some roll out completely new offerings. Hundreds of other companies have been established in the past few years specifically to provide software in this fashion.

54. Some companies take a different tack. Some offer software services on a "one-to-many" architecture — where the software supports companies, users, or transactions from a centralized data server which constantly transfers data via the Internet in both directions of the network — to provide services like payment processing or customer relationship management. The data from each action is warehoused and integrated to enhance customer service and product

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[8] *See* SIIA's Trends Report at www.trendsreport.net

[9] While many companies are clinging to the most popular term, ASP, the basic premise remains the same. The application, or service, is deployed from a centralized data center across a network, Internet or Intranet, providing access and use on a recurring fee basis. Users "rent" or "subscribe to" the applications from a central provider.

efficacy. Everything from basic applications to complex end-to-end solutions can be delivered in this manner to large and small businesses alike. Also gaining prominence in the marketplace are third-party ASPs that take the applications of software publishers and host them in a service model.

55. From the software publisher perspective, a service model allows for more efficient time-to-market for product updates and new services. Publishers can upgrade or improve products through a centralized location and react more expediently to consumer needs, resulting in more robust support. The software provider has much greater control of the consumer experience and can automate processes as a result of intelligent data storage.

56. The service model significantly reduces reliance on the upgrade-reliant revenue model. Where traditional software publishers aggregate new features for each new upgrade version, service providers can add new features, upgrade products, introduce new functionality and fix bugs in real time. The result is a fundamental shift in the ways companies provide software, improve their product, and recognize revenue.

57. While all users receive uniform updates, software as a service also recognizes each customer as unique. As publishers develop their products for service deployment, they must provide more than just the application. Smaller users are clamoring for a host of value-added services such as instructional content and operational support. In addition, as the market expands, many providers seeking to differentiate themselves and establish market reach have begun to offer unprecedented customization and personalization. Such features allow the consumer to tailor a product with ease.

58. As universal access and new services create greater efficiencies in the use and deployment of software, corporate business structures and activities are beginning to evolve. At the same time, it is important to understand that software and information products and services will not evolve in a vacuum. Computer software and information is but one component of more integrated systems and must operate with diverse interfaces, requiring companies to be more global in their management and transactional reach.

59. The software and information as a service model holds great promise for both industry and consumers. This model has certainly spawned a rise of new companies and an explosion of new network-enabled products from even the most traditional software and information companies. But as software and information become more and more like a utility, turned on and off at the flip of a switch, we can assume only one thing — that the status quo will not continue. It is essential that rigid laws and regulations not be enacted with the intention of protecting consumers that may actually hinder the success of these new business models or consumers ability to avail themselves of them.

H. Conclusion

60. Consumers are demanding and benefiting from a vast array of new technologies and business models. The old maxim that the best consumer is an educated consumer has never been more true than on the Web. The educated customer — one who understands the power that he or she holds online — is the primary force shaping the digital economy today. Businesses that want to succeed will respect this reality.

Sincerely,

Ken Wasch
President
Software & Information Industry Association