

CEM KANER, J.D., Ph.D.

Law Office of Cem Kaner
P.O. Box 1200
Santa Clara, CA 95052

www.badsoftware.com

kaner@kaner.com
408-244-7000 (Voice)
408-244-2181 (Fax)

ARTICLE 2B and QUALITY/COST ANALYSIS

Notes for an off-site talk at NCCUSL Annual Meeting, July 26, 1998
Also distributed as part of talks at UC Berkeley Law School's conference on Article 2B
and at the 1998 annual meeting of the American Council on Consumer Interests.

Businesses spend fortunes on quality-related costs. Traditionally, quality engineers categorize these:

- **Prevention costs:** costs of avoiding making defects, e.g. worker training.
- **Appraisal costs:** costs of finding defects pre-sale, e.g. inspections.
- **Internal failure costs:** costs caused pre-sale by defects, e.g. scrap and rework.
- **External failure costs:** costs caused by defects in products that have reached the customer, e.g. cost of handling customer complaint calls.

The objective of quality engineering is to minimize the total cost of quality across the life of a product.

Note that these are all costs of the seller. A cost of the customer is an externalized cost that is not reflected in the seller's cost analysis. Customer costs are partially and indirectly reflected when they bounce back as external failure costs.

External failure costs include:

- **Customer support costs**
- **Lost sales**
- **Legal costs.**

Article 2B is a multi-pronged assault on external failure costs. It drives these costs way down in mass-market cases, and keeps them low even when quality declines. This reduces the economic pressure on software publishers to improve their products, resulting, I believe, in a weaker domestic industry over the long term. And, of course, in crummier products. The table on the next page provides examples of the costs that are driven down. Article 2B authorizes these measures, and in this world of you-can't-see-the-terms-until-after-you-buy-it contracting, we should expect to routinely see terms like these.

For more details on quality/cost analysis and 2B, e-mail me for a copy of:

Bad Software—Who is Liable?

Invited address to the American Society for Quality, May, 1998.

Keynote address to the Quality Assurance Institute, June, 1998.

You might also be interested in:

Kaner, C. & D. Pels (1997). Article 2B and Software Customer Dissatisfaction.
(unpublished.) *Meeting of the National Conference of Commissioners on Uniform State*

CUSTOMER SUPPORT	LOST SALES	LEGAL RISKS
<i>Reduce net support costs and obligations</i>	<i>Reduce effects of competition</i>	<i>Reduce probability and cost of lawsuits</i>
<ul style="list-style-type: none"> ▪ Charge customers for all calls for support, even for defects. No refund for these calls even if the customer returns the software. <i>2B-703(a)(2) allows refund of purchase price after return of the software as the sole remedy.</i> ▪ No implied warranties. <i>2B-406 allows post-sale disclaimer with no opportunity pre-sale for customer to discover the disclaimer.</i> ▪ Goods-based consumer protection laws (such as Magnuson-Moss and California's Song-Beverly Act) may become inapplicable. Their scope is goods--2B transactions are transactions in an intangible (a license to use IP). ▪ No duty to mass-market customers or consumers (only to big customers) to cure defects. <i>2B-606.</i> ▪ Lesser right to a refund. <i>(Perfect tender rule available only to mass market. 2B material breach definition is much more publisher-friendly than Restatement's.)</i> 	<ul style="list-style-type: none"> ▪ No pre-sale disclosure of terms, so there's no competition on quality-related promises. <i>2B-208.</i> ▪ License agreements prohibit disclosure of details of the product, including banning writing magazine reviews without publisher's permission. <i>Some publishers already have such terms, though they probably don't work in mass-market today. 2B-102(a)(13) includes nondisclosure in "contractual use restrictions", which are deemed as OK in contracts.</i> ▪ No reverse engineering (harder to compete, and harder to do 3rd party maintenance). <i>(Use restriction.)</i> ▪ No reverse engineering for interoperability, to make two products compatible. <i>(Use restriction.)</i> ▪ Can make the contract non-cancellable for breach <i>2B-703.</i> 	<ul style="list-style-type: none"> ▪ Seller chooses its favorite state or country, for its choice of law. <i>2B-107.</i> ▪ Seller chooses its favorite forum. <i>2B-108 (but choice can't be "unfair & unjust" as term is used in Carnival Cruise Lines.)</i> ▪ No damages. Rescission is the only remedy, and rescission doesn't include repayment of fees for "support" (such as the call to ask for a refund.) <i>2B-703(a)(2)</i> ▪ Remedies can be excluded inconspicuously, post-sale. ▪ Eliminates the concept of the "minimum adequate remedy" which was an influential comment in Article 2. If the sole remedy fails, too bad. ▪ There are, of course, no damage limitations available to mass market customer with respect to vendor's recovery from the customer. Vendor is exclusive definer of what constitutes a breach on the customer's part.