Data Integrity and Personal Integrity

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A friend and colleague (let's call him Salil) recently got hired by a major international manufacturer of high-technology products (let's pretend they are, say, integrated gateway security/intrusion detection/intrusion prevention devices). The company has major government and private organizations as customers all over the world and has a staff of about 60.

Salil has 30 years of experience in high-technology sales and marketing, including extensive experience prospecting for and closing government contracts. He's an expert at writing responses to requests for proposals (RFPs) and is brilliant, creative, imaginative, and personable. He's one of the nicest people I've ever worked with; as a former rock-climber (long ago), I say that I would let him hold my rope – that is, I'd trust him with my life.

The interview process took a couple of weeks, with meetings between Salil and the human resources manager, the director of sales, and finally the president (owner, founder) of the company. Salil really hit it off with everyone he spoke with and several of his colleagues (including me) gave him excellent references by phone.

Salil started work on a Monday. That morning, he met with the sales manager and several members of the sales team. Within an hour, he was looking through the sales database that recorded all the contacts made by the company over the last 15 years. In passing, he was shown an Excel spreadsheet that was an extract from the database – except that it couldn't actually be an extract any more: it contained entries that were not in the database as well as some entries that were different from those in the database for the same customers.

What had happened?

The staff had committed the classic error of naïve computer users: they modified what should have been a read-only copy of the data. They thus ended up with the classic result of such parallel modifications: inconsistency.

Salil and one of the sales staff slaved over the database for about 10 hours that Monday and the next day looking for the correct data and updating the database. They were pleased with the results and Salil then turned to looking at the rest of the information infrastructure for the sales group. Conditions were not good.

- The Web site was essentially a copy of one of the company's old sales brochures. Linkages were minimal and there was no easy way to update any given component without redoing the entire page.
- Every component on the site was completely static: not one dynamic image, not one video, not even a search field.
- Several links were 404s (broken).
- There were a few e-mail addresses on the "Contact Us" page – but two of them were out of date and would result in an e-mail bounce if anyone used them. There was no online

message form with a CAPTCHA< http://www.captcha.net/ > (Completely Automated Public Turing test to tell Computers and Humans Apart) to defeat spammers, either.

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