

PROLOGUE: The Road to Ocean City

White Plains, New York, is only 247 miles north of Ocean City, Maryland, but it was a distance that took me thirty years to cover. In the journey, I learned more than a few things about business, how to run a business, specifically a software business. I learned a few priceless kernels about human nature as well, my own most especially. In the passage, in a sense, I grew and came to maturity, as did an industry that barely existed beyond a faint glimmering in the minds of a few dreamers.

In that time, I built two businesses from the ground up. I walked away from one when it ceased to be fun anymore, and was fired by a board controlled by venture capitalists at the other, right as I was becoming convinced the long-awaited potential of technology – that which we, as an industry, had been long promising in glossy marketing campaigns for years – was about to be realized. The irony of the timing of that moment did not escape me.

I did not set out intentionally for Ocean City when I first went to work for International Business Machines in 1960. But serendipity has a curious way of shaping one's course. Memorial Day Weekend, 1992, newly unemployed without a shred of a golden parachute to soften my fall, Ocean City lay out the front windshield of my car like a mythical beacon shining somewhere several hundred miles distant at the end of the stream of traffic I was caught in, rolling toward the shore.

It was a vibrant moment in my life, surreal in its clarity, as such moments typically are. I even had the temerity to be excited. But starting over – more accurately, *dreaming* of starting over – in your late fifties has hurdles one cannot begin to fathom when starting over in your thirties or forties. Both I had done before. But with less than \$50,000 to my name, I was banking more than just modestly on the hope that I had indeed learned a few things about the business along the way.

It all had to do primarily with the notion of assumptions. The beauty of assumptions is that we rarely think about them. They go unquestioned, but are immeasurably important to almost everything we do, from getting out of bed in the morning, to the rationale for focusing a life's energy toward achieving some singular goal. We assume that with the light of dawn, there is value in surrendering sleep to engage in the activities of the day. We drive to the office feeling safe in the assumption the other guy

will stop at the red light rather than barrel through the intersection and take us into oblivion as we enter it under a green light. We work hard at our jobs assuming we'll at least get paid for our efforts, if not reap some deeper satisfaction in our tasks.

Thirty days prior I had been summarily discharged by the board of Profitkey International, Inc. I had started the company on a shoestring in 1979 and had leveraged it into a successful manufacturing software company in a brief run of years. But Profitkey, like many other thriving software companies of the early 1980s, had encountered difficult times brought on by rapidly shifting preferences for technology, sparked primarily by the personal computer revolution. Technology began to shift dramatically in the waning years of the decade as the price/performance of the PC began to heavily erode the entrenched base of the mainframe computer. Prominent mainstay system vendors began to look upon their large installed base of customers as "boat anchors" producing horrific drag on their ability to shift to smaller platforms. Small software startups deploying the latest in technology were the young "Davids" to the behemoth Goliaths lumbering along trying to figure out how to support a two-product development strategy. Profitkey was no exception.

I knew what we needed to do, but was hamstrung by thinning margins and a board looking for greater profits. The marriage of convenience was stressed to the breaking point. The board voted no confidence in my reign and I was, in a manner of speaking, walked to the parking lot, hat in hand, and told to go home.

It was not an easy indignity to endure. It was a stress-filled experience – but I was excited, too. For I knew – *and arguably better than anyone else in the business* – where a mother lode of untapped market potential lay, hidden at the very feet of every manufacturing software vendor in the business. It lay hidden behind assumptions, assumptions that had been made 30 years before in the very first design effort of an integrated manufacturing application. I knew this because I had been a member of the small, select team of people who'd scoped the design for IBM. And while the technology, the functional breadth of manufacturing applications, and the critical importance of manufacturing competitiveness had all undergone profound transformations in the ensuing 30 years, there had been almost zero tolerance in the industry for systematically questioning the early assumptions upon which manufacturing information technology was based. It was as though what we can do 30 years before was inviolate, set in stone. But now, with the advent of truly business-class PCs and the Windows environment, we had the technology capable of breaking through the resistance by exploiting the weight of end-user acceptance. And in this set of circumstances, I was absolutely convinced,

lay the golden opportunity I wanted to exploit in starting another software company.

Memorial Day weekend, 1992, I was on my way to Ocean City to meet a man I'd never met before, to make him an offer I hoped he couldn't refuse. I was confident I'd at least get a proper hearing. The card in my favor was his son, David Layne, who had been an employee of mine since I'd first hired him as a contract programmer back in Marathon, Florida. He'd been key to the success of Profitkey. One could even say vital.

At the time I hired him, David knew more about outboard motors and how to read water over a reef than he did about software. But he had a rare blend of innate curiosity and amusement, always wanting to know how, exactly, something worked. He'd proven not only a natural, but also a truly gifted programmer. It was uncanny how David took to programming when he joined my son Michael and I in the small startup that grew to become Profitkey. It was like he could glimpse whole design panoramas from bits of detail he would draw out of me. He referred to it as simply "connecting the dots" after he saw the "theme." I came to trust him implicitly in the foundations he laid in the elegant code he wrote.

My vision, heading south to Ocean City to talk with David's father, was to take my 30 years experience in the software business – having started out before the term *software* was even associated with what we were doing -- coupled with David's genius for programming, and create a manufacturing application system that truly served the critical needs of the customer. I wanted to build on some of the pioneering work Dave and others of our team had done in the early years of Profitkey. But I wanted to go much further, too. I wanted to design and build a manufacturing control system the way it should be done to support the way the business of managing production is meant to be done. Owing back to the set of design assumptions we felt compelled to make when we designed the first integrated manufacturing application package 30 years before in White Plains, NY, we had effectively forced the entire American manufacturing base – certainly every company that had adopted manufacturing resource planning (MRP II) applications – to alter the way they managed production to conform with our set of assumptions. The argument could be made – and I believe strenuously – that it had cost American manufacturers billions in lost revenues, legions of unhappy customers, and countless failed businesses.

Ocean City sits hard on the Atlantic, a dot on the map that causes thousands of families from all across the interior mid-Atlantic region to flock *en masse* every summer, commencing precisely with Memorial Day. That weekend is like a seasonal homing signal. The city lies astride a strip

of Barrier Island located between the Delaware and Chesapeake Bays. It has a logic a programmer would love, laid out in neat blocks that run from First Street in the south, down near the Boardwalk, up to 142nd Street, which borders – literally – the Delaware state line. In the off-season, there are about 50,000 souls who enjoy the solitude of the wide Atlantic staring them full in the face. In the summer, the population swells to well over 300,000. Hotels, motels, apartments-by-the-day and -week run up the strip from the Boardwalk all the way to the state line. Besides sleeping, people have to eat. Ocean City may not have quite literally a thousand restaurants, but it certainly seems that way.

Joseph Damiano owned two of them at the time; both named The Olive Tree. Known to everybody as “Buddy,” Damiano had moved to Ocean City in the early 1950s to open the first Olive Tree on a site where his sister had been running a nightclub. Good, basic, hearty Italian fare was standard. When I drove down to meet with him, Buddy didn’t know a disk drive from a modem, but his Imperial Crab Pizza was without peer.

Damiano is easy-going, with an optimistic outlook on life, an attitude that is priceless in the restaurant business. He and David’s mother divorced when David was twelve. David had grown up with his mother and stepfather in Florida, but he and his father had remained close. Though David insisted we could have negotiated terms to a workable arrangement with his father by telephone, I wanted to meet the man. He had fathered an amazing prodigy. And, after all, I was going to ask him for \$30,000, no small figure on his books or mine. That sum would front David’s salary for twelve months – what I figured was the bare minimum in time we needed to get our project off the ground. When we sat down together in the television room of his spacious, two-story home, we started from positions that were actually very similar in perspective. He and I are about the same age. But more than age, we both shared a common desire to give his son the opportunity of a lifetime – if we could pull it off. Gut instinct told me that the software market was more than primed for what we had in mind.

Sitting with David and his dad there on the edge of the Atlantic, I knew what I was proposing was the kind of thing that would really get David excited. He’d spent ten years learning the craft of software programming; this was an opportunity to take all that he had learned and set out on an adventure to create something that had never existed before.

I explained in general terms what we wanted to do, how it was dependent on David and I doing it *together*. I had a vision for how to build a manufacturing software system the way I believed it always should have been done. I saw how to shatter the 30-year conceptual bottleneck that had hamstrung system designers and manufacturing executives alike – limiting the former creatively, and the latter financially, ultimately competitively. I wanted to exploit the newest technology available, which for the first time

in 30 years made it possible to deliver on what had long been promised. But I needed Buddy Damiano's son to do it. I needed David's native brilliance to grasp the conceptual, connect the dots, and make it real.

I desperately wanted to connect the dots, so to speak, of my own experience, those that stretched all the way back to White Plains and my first days at IBM. I'd seen much. I had been integrally involved in the development of the software industry, had witnessed its inception and seen it explode into a multi-billion dollar business spinning the wheels of industry around the globe. It was an opportunity I didn't want to miss, even at an age I should have been thinking, perhaps, more about how to entertain myself in retirement. Opportunities like this, however, come along – if you're lucky – only once in a lifetime.