



## **Oral History of Franklin Pitcher (“Pitch”) Johnson**

Interviewed by:  
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## Franklin Pitcher (“Pitch”) Johnson

Conducted by Luanne Johnson

**Abstract:** Franklin Pitcher (“Pitch”) Johnson, one of the earliest venture capitalists in Silicon Valley, discusses investing in Boole & Babbage, one of the earliest software products companies, in 1967. He describes some of the problems that Boole & Babbage faced in selling their products into a market dominated by IBM and how IBM initially coached its sales staff to persuade its customers not to buy Boole & Babbage’s products but later changed its policy to be supportive of the increased efficiency that the Boole & Babbage products brought to their customer base. He talks about the growth difficulties that Boole & Babbage encountered in the 1980s until their business strategy was refocused toward client/server platforms in the 1990s and the challenges of creating a start-up company in a new industry.

[Editor’s Note: This interview was conducted at Mr. Johnson’s office in Palo Alto, CA.]

### Founding and Early Growth of Boole & Babbage

**Luanne Johnson:** What I’m doing is researching the early software industry. I’m focusing specifically right now on the people that founded companies before June of 1969 which is when IBM announced unbundling.

**Pitch Johnson:** That’s right.

**L. Johnson:** Because there are misperceptions about the beginnings of the industry. The general public thinks the software industry started in mid-1970s with Bill Gates

**P. Johnson:** I don’t know anybody that thinks that.

**L. Johnson:** Well, that’s what I see in the business and general press. Those who know that the industry existed before that say that it started after IBM unbundled in June

of 1969. That before that it wasn't possible to sell software because IBM and the other computer manufacturers were giving it away free.

But the truth is, actually, there were a number of companies that started before unbundling was announced. In 1971, Larry Welke held the first of his Million Dollar Awards ceremonies. There were 29 software products that had sold \$1 million by January of 1971, so obviously those companies had been established for a number of years to have that amount of volume by that time.

**P. Johnson:** Yes.

**L. Johnson:** So I'm focusing on those companies that were started before June of 1969, that saw the potential for software as a product before then and had some success. There were a lot of them that didn't last more than a couple years.

**P. Johnson:** A lot of companies.

**L. Johnson:** But there were a number of them that did well. Most of them, interestingly enough, are no longer in existence because they've been bought out. The question I asked Paul Newton [President of Boole & Babbage] when I interviewed him recently was, "What's unique about Boole & Babbage?" I believe that Boole & Babbage is the software products company – not services, but software products – that's been around the longest.

**P. Johnson:** There was a company created about the same time as Boole which had a product called Librarian. Do you remember that one?

**L. Johnson:** Yes, that was Pansophic. They were acquired by Computer Associates so they're no longer around.

**P. Johnson:** Is that right?

**L. Johnson:** Yes.

**P. Johnson:** Boole & Babbage was incorporated on December 19, 1967. I have the corporate seal right here. Ken Kolence and Dave Katch started a software company in the middle of 1967 to do consulting in the field of making computers run better. And, specifically, making IBM computers run better. The trick up until then was getting computers to run at all but the announcement of the 360 – I'm not sure when that was...

**L. Johnson:** The 360 was announced in April of 1964.

**P. Johnson:** I would say that probably stimulated a lot of people to think about software products. But in any case, in mid 1967, Dave and Ken came to a friend of mine, John Bryan, and said that they wanted to start a company, which would not be a consulting company, but which would be a company to build products to help computers a) run programs better and b) be configured better. They had two products in mind. So John called me because we were doing investments and he knew I was investing in the computer field. I met with these guys in June or July of 1967 and we talked about forming the company and, even then, they had the idea of calling it Boole & Babbage after George Boole and Charles Babbage. That turned out to be a very memorable name that gets a lot of attention.

So we talked and talked for a while. They said that there was a basis for a company because IBM's operating systems, OS and DOS, weren't that great and they could invent some products that could be sold to many customers that would help their computers run better and faster. So we made a deal. I don't remember the exact investment deal, but it was about \$250 thousand.

They incorporated on that date and started operations and hired their first employee, Gary Holtwick. They set up offices on San Antonio Road and developed the products. The first task was to develop some hooks into the operating system so they could extract the data from the operating system.

The first product was called Problem Program Evaluator or PPE and it looked at, when a computer was running a program, where it was spending all the time. In simple form, it just gave you an analysis of where the time was being spent. It didn't give you many answers as to what to do about it. But it told you where the problems were.

The second product, which came along soon afterwards, was called Configuration Utilization Evaluator or CUE and it looked at how much time the peripherals and the mainframe were taking to interact with each other and gave you an analysis of where that time was being used. It gave you a look at where you should turn your attention to reconfigure the system to speed up the interaction between the mainframe and various peripherals.

So then we had the problem then of how would we sell them. We had a marketing VP named Jen Bryan and we started selling these products. I don't remember who our first customer was, but we sold a few hundred thousand dollars worth in that year. I don't remember if we got to a million in 1968 or 1969, but I do know in 1971 our sales were \$1.7 million. That number I just happen to remember.

So within a couple years we had accumulated \$1 million worth of sales and we had a big party that year. And for several years we had a big party after work every time we had

\$1 million more in sales. But when the company got up to \$200 million in sales we didn't do that any more – because it got to be too many parties! We did continue to have some pretty good parties with the high morale and high spirit of the company, but we didn't do it based on \$1 million in incremental sales anymore.

And we began to improve those products. Those were the two basic products that got the company going and PPE, after many, many evolutions and changes, is still in our product line. And CUE as well, but of course they are only the primitive forerunners of the products we sell now. The products we sell now tell you a lot of what to do about the problem, not just identify where the problem is.

The mainframe performance business is an important business for us. Paul [Newton] made the decision about four years ago to put some money into the mainframe product line to upgrade it and make it better. Because he said – correctly, and the board backed him up on this – that the mainframe world is not growing in size. They were there and they were big and people were not paying attention to them, but we've had a growing business capturing market share of products designed to make mainframe systems run better. Our big hope for the future – and it's turning out to be a valid hope – is rapidly moving to have half of our business in networks.

By being independent and by having independent-minded people, the company developed kind of a personality of doing things its own way because there was nothing to pattern after. There were companies like Pansophic out there but we didn't know much about them. We just knew that there was a new thing happening and wanted to be in on it. In 1971 Bruce Coleman came on board from a company back east and he brought business discipline to the company. It had been a technical company to that point. They had sales and marketing, but they didn't really have much business planning or strategy. Bruce brought that to the company and served as President pretty much through the 1970s and the company grew under his leadership.

Ken left the company when Bruce became the president and started a company in a field that he called software physics. He felt that he had discovered the underlying principals of software design and left to start a company to focus on that.

So we had this period of growth in the 1970s in which we got up into the \$10 million range per year. We moved down to Sunnyvale in the general area of Moffett Field. Then we moved over to the Homestead area. Then we moved to Oakley Boulevard and then to Zanker Road. So we had five different headquarters locations.

I wish I had the numbers in mind but in the 1970s we were in the teens and I think we finally reached the \$100 million mark in 1980 sometime.

**L. Johnson:** I have the rankings that *Software* magazine published over the years and I know that in the late 1970s, early 1980s, Boole & Babbage was up in the top 10 -15 companies.

Let me take you back to the 1960s for a minute.

**P. Johnson:** Okay.

### **Problems with IBM Competition**

**L. Johnson:** One of the things that I'm trying to focus on is the relationship between independent software companies and IBM in the 1960s. Ken has told me a lot about the problems that Boole & Babbage had with IBM and how IBM salesmen didn't like these products because they had a way of showing that maybe what people needed to do was upgrade their disk drive, not upgrade their CPU.

**P. Johnson:** Absolutely.

**L. Johnson:** I'd like hear what you have to say about the relationship between Boole & Babbage and IBM.

**P. Johnson:** Well, there were two big challenges to Boole & Babbage in the earlier days. One was a product that NASA had that they gave away and we were really worried about the fact that it was a product that was competitive with PPE and was given away by NASA. We thought, "Gee, how can we possibly sell against that?"

It turned out, though, that what we now know is that an orphan software product that isn't maintained and kept up can't compete. We did have people that chose that over our product but they didn't have any help, they didn't have any support, they didn't have maintenance. Because IBM put some new upgrade to the operating system every few months and we had to keep on top of that.

**L. Johnson:** Was that product was written by NASA?

**P. Johnson:** I'm pretty sure it was written by NASA and it was in the public domain because I guess that programs written with government money have to be made freely available.

So we had to figure out how to compete with that. Turned out that we made the correct decision when we decided to give terrific service. At the time we were only charging about \$10,000 for the product – maybe not even that -- but we would have service

people go and help install it. And then the customer would buy maintenance. I don't know if we were the first, but we were among the first companies to realize that maintenance was something you could charge for. We did a year's maintenance with the sale and then we charged for maintenance every year as every software company does now because maintenance is where the profits are.

**L. Johnson:** Informatics went for about four years giving away maintenance for free. It wasn't until about 1971 that they began to charge for it.

**P. Johnson:** I would call us pioneers in charging for maintenance. But it also made the NASA product ineffective because it didn't work very long or very well and people had no way to get help by calling them. So they were far better off in a multimillion dollar computer shop to spend a few thousand bucks on well-maintained, well-serviced software.

**L. Johnson:** One of the points I want to bring out is that the people running these companies were really just flying by the seat of their pants because there was no existing business to pattern after. And they came up with business models – like charging for maintenance – that then became the standard.

**P. Johnson:** That's true of every business. It applies to those of us that were early into venture capitalism. There was no business. There were no proven ways of doing venture capital. We just fooled around and figured out, well, you know, you use common sense and the little education you have and you figure out, what is it that makes companies successful? And so, we built models about looking at future values, discounting and the things we do routinely now.

Any industry – software, venture capital and biotech are the ones I've been involved in – they all invented ways of doing things because they *had* to invent them. It wasn't that this was an on-going business. It was a blank slate and people started writing on it and some things were wrong. We did some things wrong, too.

The other thing that we were dealing with every day was the IBM salesmen who were informed by sales management about how to give away products to make the sale. This is what we knew was happening. I didn't sit in the meetings, but we had reports from customers that IBM was giving away stuff and talking down Boole & Babbage because they realized that you couldn't sell a mainframe if our product showed that the problem was in the peripherals. I had a classmate, a good friend named Spike Beitzel, who's still a good friend of mine, who was IBM's national sales VP or something like that. I ran into him at a tradeshow and he said, "You know, you guys are competitors of ours, really, because when you sell your products, people postpone upgrading their mainframes."



We realized that IBM had no motivation to provide customer base with far more efficient software and a far more efficient operating system because they upgraded computers faster because of the inefficient software. So Boole & Babbage found its niche by saying that if you spend a couple of thousand with us, you can postpone the upgrade to your mainframe. Everybody was growing and had a need for increasing capacity a lot. And so, by customers delaying purchases for a while by using Boole & Babbage software, we essentially postponed business for IBM.

Anyway, we were under a lot of pressure from IBM. But IBM, being a smart company had an excellent local man, the VP for industry relations for this region. I wish I could think of his name.

**L. Johnson:** They had some of the best.

**P. Johnson:** So we sat down with him, without having a lawyer present, but having had legal advice, and said, "Look, we think you're doing things to hurt Boole & Babbage. You're threatening to give away products, you're including things that we charge for, and we think that you're behaving in an anti-competitive way."

I was Chairman at this point. I became chairman when we made the transition from Ken to Bruce.

So he said, "Well, I don't know any facts. Let me hear what you have to say and let me check and see what I can find out." He didn't admit a thing and he shouldn't have. But it wasn't more than two, three weeks later when a blue letter came out. Blue letters are the letters that IBM sales management sent out to IBM salesmen. It said, "We'd like to reiterate our policy that we do not give away products which other companies are charging for." Of course, it was actually a change to their policy.

They included specifically the concerns we raised about their behavior and said that they would continue to have published prices for their products and that they wouldn't be giving away products just to make a sale. And they stopped doing it. If they had kept on doing that, I think Boole & Babbage would have had a hard time growing. They had began to develop products somewhat like ours which weren't as good as ours, but they did give them away when they had to to get the business. Nobody sued them but they decided not to keep on doing that.

Another issue with IBM was getting them to tell us about things that were going to change so that we could have our product ready that fit the new configuration. Now, they didn't have to that, but they made what I thought was a wise decision to cooperate with Boole & Babbage. They decided, I think, at some point in the mid 1970s, that it was

a good idea to help their customers run their computers better, that it was strategically smart to have data processing run as efficiently as possible, so in fact, it would become more and more useful to their customers' organizations. So with that policy change, they decided to give us information about their product releases.

So that was a cooperative thing that IBM did. And I wish I could remember the name of that VP but obviously he could pick up the phone and get some action.

### **Management Changes in the 1980s**

**P. Johnson:** Replacing Ken and bringing in Bruce was difficult because Ken was a good friend but I really don't think that Boole & Babbage would have been able to grow like it did without Bruce's management experience.

**L. Johnson:** But that's become another model that's used all the time now where the outside investors bring in the a professional manager to run the company after the technical guy gets it going.

**P. Johnson:** Sometimes the technical guy ends up running it himself, like Bill Gates did. But he's not really a technical guy. He's a very aggressive marketing businessman. You know, he acquired MS DOS. He didn't develop it.

**L. Johnson:** Frank Gaudette was the first CFO that Gates hired. He'd previously been at Informatics and a number of other companies. He used to come to the ADAPSO meetings and say that he had been in the business for years and years and thought he really knew his financial stuff but that Gates would go right by him. He said Gates really knew it instinctively.

**P. Johnson:** So those were the early threats and then the company consolidated itself pretty well and made money throughout the 1970s. Then Bruce was hired away by Informatics to be their No.2 guy. After Bruce, we brought in Mike Patatucci and then Jim Norris but the company continued to lose ground because of the changes in the market and in the IBM technology platform.

In 1980, we brought in Jack van Kinsbergen who had been at IBM and Amdahl. He ran the company through the early and mid-1980s and took it public. But then IBM made major changes to its operating system which obsoleted a lot of the Boole & Babbage products and the company lost a lot of money. We brought Bruce back in as CEO and he got things turned around and got the company profitable again and then in 1988 brought in Johannes Bruggeling, the president of Boole and Babbage Europe to replace Bruce.

Then in 1991, we brought in Paul Newton, who was a board member, and he got the company refocused on the client/server platform, and has run the company successfully since then.

### **Venture Capital Business in the 1960s**

**L. Johnson:** Great. I have a question for you since you were a venture capitalist for a software company back in the 1960s. One of the things that I've heard over and over again is that there were no venture capitalists willing to fund software products companies when the industry was starting to really get going in the early 1970s. I've had people say, "When a venture capitalist saw a software products guy walking down the street, they'd cross to the other side of the street." Were you the only VC that was out there?

**P. Johnson:** Well, in 1967, there wasn't much of a venture capital business at all. So we were looking for things to invest in and we felt that it just made sense to have standard products instead of every company designing their own. Ken and Dave really had that insight very early on and I just thought it made sense. And we had a group of venture capitalists who were very much individualists and went with what they thought sounded like a good idea even if it haven't really been proven at that point.

There's always been this perception, when someone gets turned down on venture capital for whatever reason, that venture capitalists just don't do that particular kind of company. I don't know who the backers of some of the other early software companies were.

**L. Johnson:** Most of them didn't have venture backing. They were boot-strapped.

**P. Johnson:** One of the things I do know is that was very easy for two guys to sit down for six months to a year and write a very good startup software product. The hard part is product number two. Then you're a company and you do it with people you hire who want to work 12-hour days instead of all day and all night. So the next product always costs a lot more because the entrepreneurs, they just work day and night and they get it done.

There were other software companies out there in the late 1960s, but I don't really know who backed them.

**L. Johnson:** There were quite a few software services companies that went public in the 1960s but their stocks crashed in the early 1970s and that put a damper on any kind of investment in software companies.

Anyway, I think that wraps this up and I know you have another appointment to keep. Thanks so much for your time. It's been very interesting.

**P. Johnson:** Thank you.