The Nicholas Factor

There's probably nothing more satisfying than to have a smooth running, well-oiled machine for a business. And while we'd all love to have our businesses running efficiently, it's an ever illusive proposition for most.

It takes a special talent to design and implement highly efficient processes, a talent and gift Nicholas St Jon possesses.

Many of the stories you will read Inside will seem like "anyone" could have made those improvements to make the process much more efficient, but the fact of the matter is, they didn't get accomplished until Nicholas St Jon got involved, He saw what others could not see. That's "The Nicholas Factor".

Inside are just some of the spectacular accomplishments, not to improve processes by percentages, but exponentially:
He can do it for you, too!

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- 1978 onboard the U.S. Navy's nuclear submarine USS James Monroe 622B, Nicholas was watching his fellow crew members labor under the tedious task of calculating the corrections for the ship's under water log calibrations, Nicholas wrote a program for a faired line curve calculation on a Tektronix Desktop Calculator. These calculations were done by hand, plotting out the numbers from the runs manually and then figuring out what the offset was and entering those into the underwater logs for correction.
  - Doing this task took about 4 hours to complete, but with Nicholas' faired line curve program, it was reduced to just 2 minutes and with a higher degree of accuracy.

- 1978 onboard the same submarine, Nicholas was tasked to be a Radar operator, monitoring contacts and alerting the Officer of the Deck (OOD) of any threats by other vessels and to calculate how close they might come to the ship. Using charts, ship's speed and course, and at least two relative points from the radar, and a set of parallels, technicians were able to calculate the "closest point of approach" (CPA) of a vessel. Doing this process manually, a good radar tech could give the OOD this information in about 1 to 2 minutes.
  - Utilizing a set of formula on a Texas Instrument TI-59 with a mag card reader, Nicholas programmed in the formula and was able to give the CPA, course, speed and time of CPA in about 10 seconds.

- 1981 while serving on the USNS Range Sentinel, a telemetry ship that tracked and protected the range from errant missiles launched for testing, one of the tracking antenna calibrations was done with a scope attached to the antenna and an 80 foot tower with a target on it. The problem was that because it required minimal movement of the ship in the water, that while moored at the dock, fishing boats came and went all night long, making the calibration difficult as the boat moved up and down and side to side.
  - Nicholas recognized that these highly sensitive and powerful antenna could lock onto a signal on this tower, cancelling out any movement of the ship from other vessels passing by. What had been a several day (or rather night) process could now be accomplished in one single night and to a much higher degree of accuracy.

- In 1982 at a large screen TV projector company in Titusville, Fl, working his way up to the "burn in" room where 7 projectors were "tuned" and required to run error free for 72 continuous hours before shipping out, Nicholas performed all of the alignment procedures. No two projectors were ever the same due to a number of factors, including differences in the high powered electron guns.
  - Nicholas figured out that if you identified the weakest gun, usually the green tube, that all of the projectors could be tuned electronically to be exactly the same. Mark Cosenplek, the design engineer, came in one day and remarked that of the hundreds of projectors they had manufactured, no two were ever the same, but now all 7 were identical.

- In 1983 at the Kennedy Space Center working on the Space Shuttle. Assigned to the External Tank (ET) group, we were tasked with preparing the ET for mating with the Solid Rocket Boosters and the Orbiter. When the ET came into the Vehicle Assembly Building (VAB), it had been shipped in from the plant outside of New Orleans with shipping covers on many of the tubes and valves. Because of the risk of contamination, when the shipping covers were removed and the working covers were installed, it required a "clean room" environment. The technicians would construct a room using uni-strut which could take 2 to 3 hours to construct, then when the task was finished, the technicians would disassemble the room.
  - Nicholas redesigned the "room" so that by loosening just 4 bolts, the room was made to collapse and could be stored on the level where it was to be re-used. Now 2 techs could setup this room in less than 10 minutes, a 12x - 18x's efficiency improvement.

- 1984 at KSC, writing out the parts tags for hardware that was taken off of the ET was a time consuming task, taking Techs and Quality Control personnel about 2 hours to hand write out all of these tags.
  - Working with a friend in another division that used a Wang word processor, Nicholas and his friend were able to produce 9 sets of these parts tags in just 15 minutes, a savings of almost 18 hours, a 72x's improvement.

- In 1987 as owner of a poster company, we were plagued with getting a display of our posters into stores, space on the shelves and on the floor was at a premium.
  - Nicholas designed a cardboard box that held 10 posters that was used for shipping and doubled as a hang-from-the-ceiling display when in the stores; problem solved.

- In 1988 as a subcontractor for Chrysler Corporation building the test panels for the M1 Abrams tank. While working as temp labor on an assembly line for the test panel, several thousand wires had been improperly prepared and needed to be reworked. Being the new kid on the block, that laborious task landed on Nicholas. Having been trained as an electronics technician in the U.S. Navy and Kennedy Space Center and understanding specs for stripping the wires for connection with the test ports and the strict tolerances, Nicholas' job was to clip the wires and re-strip them with a standard set of wire strippers. The problem was that a tech was essentially "guessing" on stripping the wires for the correct amount.
  - Nicholas found that there was a screw in exactly the right place on the wire strippers where a crimped terminal lug could be attached and bent to the exact length needed. What had formerly been the bottleneck in the assembly of operation, Nicholas was now able to catch up the 14 units of the 129 test point panel in just 2½ days. The previous rate was 2 panels per day which was increased including the new stripping procedure to 5.6 panels per day.

- In 1989 working for Harris Corporation on the DSP satellite project subcontracted from Aerojet, the Central Control Unit (CCU) for this satellite required dozens of tests in the environmental lab to ensure it could withstand the rigors of launch by subjecting it to substantial heat and cold, vibrations, and vacuum testing. The manual part of these tests involved connecting the CCU to the test unit and taking hundreds of reading on a Logic Analyzer. On average, it took about 42 hours for a complete set of tests if no problems were encountered. The manual for these tests had "hand drawn" waveforms on it and cable connections were many times redundant configurations. The reading of each waveform was tedious, requiring the technician to try multiple settings on the Logic Analyzer.

- Nicholas took notes on each and every Logic Analyzer (LA) configuration so that it took out the guess work as to the settings needed to get a good waveform, reducing LA setup to just 10-15 seconds instead of 2 – 15 minutes. Creating a set of "notes" and combining all the tests for a specific cable configuration, we could now perform this 42 hour set of tests in just 16 hours. This saved over 3900 man-hours of labor in testing this unit. Bringing in the project 9 months ahead of schedule and nearly $2 million under budget.

- In 1991 while temping at the Jet Propulsion Lab in Pasadena, Ca, before email systems like we have today, scientists at JPL would receive twice daily electronic mail messages from various governmental agencies across the U.S. These "e" mail messages came in all at one time and had to be parsed out, removing the headers and footers, and printed for each recipient. This task typically took 45 minutes to 1 hour twice a day manually.
  - Nicholas developed a macro that ran in Word Perfect that could parse out each message, remove the headers and footers, and print it out all in under 2 minutes.

- In 1992 at JPL, Nicholas was hired to develop MS Excel macros for the Resource Cost Planning system. The project was way over budget and almost a year past the delivery deadline. The bottleneck was that the Excel spreadsheet categories were continually being added to. Thus reading them into MS FoxPro utilizing Dynamic Data Exchange (DDE) calls was fighting a losing battle. The FoxPro expert tasked with reading in these values from the Excel Spreadsheet was terminated and Nicholas was assigned the task and given 2 weeks to accomplish what his predecessor had been unable to do in 9 months. After 2 days of analyzing the existing code, Nicholas decided to scrap all of it and come at it from an entirely different approach.
  - Since Excel and FoxPro were both Microsoft programs, Nicholas realized that FoxPro could run commands to turn the entire spreadsheet into a database, then systematically parse through the data regardless of how many changes in the number of categories each section had. With this breakthrough, we were able to fully process our first spreadsheet in just 11 days.

- In 1993 at JPL, shadow systems were a huge time, energy, and resource waste at the Lab. While working as a Group Admin Assistant, one of my tasks was to generate Procurement forms for parts used by the scientists and engineers. There were several "shadow" systems for Procurements but none that were very efficient.
  - Nicholas built a database using dBaseIII+ on a little 286 networking server that used the multi-part "official" form of the Procurement Division and made it available to all 8,000 people on the entire Lab. Even the "Just in Time" guys utilized the system as it was much more efficient than the mainframe system.

- In 1995 at JPL, keeping track of all the labor hours by project was a very time consuming task each month for the Section Admins. Division required them to produce a report each month to check to make sure that their projected man-hours and actual man-hours were relatively close.
  - Nicholas was able to pull down from the lab's mainframe all of the Divisions monthly labor times and charges. A program was developed that accomplished the task for the entire Division (6 Sections) in just under 90 minutes, as opposed to just one Section of the Division taking 19 hours to do manually, an efficiency of 12.6x's more efficient.

- In 1996 at the Disney Travel Products (DTP) division, Nicholas was hired to automate the process of artwork approval for products that would have Mickey Mouse, Minnie Mouse, Pluto, etc. on them. The charter for DTP was for just 16 people total. The corresponding group in the Consumer Products division had 30 data entry people, so automation was a must.
  - Nicholas developed a FoxPro program that could read the then in beta version Adobe Acrobat's pdf files, extract the data, route it to the next inbox, write back into the pdf form with a sequence number and automatically email it using cc:mail back to the sender, all without one single data entry keystroke. The Consumer Products division boasted of being able to get in a new form, catalog it and assign a sequence number to it, all in less than 30 seconds. The DTP program could process 10 such forms in 2 seconds, a 150x improvement.

- In 1998 doing Y2K cleanup at the Los Angeles County Assessor's Office. Was tasked with evaluating the code for any Y2K potential problems.
  - While at Disney, Nicholas had to certify that DTP's program was Y2K compliant, so developed a Y2K analysis program to analyze every line of code in a FoxPro project, automatically replace certain types of known problem codes with new compliant code and generate a printout of every date related code. Utilizing the new Y2K Solutions program, Nicholas was able to take the first task which had been slated for 4 days and accomplish in just 3 hours, including setting up the certification lab. Overall, was able to reduce 12 months of slated tasks to just 12 weeks. After contacting Symantec to possibly partner with them, Nicholas' Y2K Solutions magically showed up in the Symantec's Y2K solution package.

- In 2007 working on a system for Chiropractors and Personal Injury Attorneys that need a specifically formatted "narratives" report for the Colossus system.
  - Nicholas developed the Narratives Reporting system in 5 weeks, that included having to learn the sequencing and starting over 3 times due to constraints of the pdf documents originally thought necessary to be used. The people Nicholas was working with decided they would not accept the royalty offers and re-purposed the process, even with the templates and processes already laid out for them to copy, took a team of programmers 7 months to duplicate the program.

- In 2012 on the IBC project, Nicholas was introduced to a gentleman working in the Insurance industry promoting the Infinite Banking Concept, where they would teach people how to essentially turn a specially designed permanent life insurance policy into a bank (pool of money) for use by the policy owner. After the gentleman's presentation, the presenter offered to do an analysis to show a potential client how the concept would work for them personally. Nicholas found out that a series of spreadsheets were used and the process took about 3 to 5 hours minimum to generate the report.
  - Nicholas worked with this gentleman to learn the intricacies of the process and generated the intake forms and algorithms to generate the resulting 8 year analysis and delivered the first online analysis in just 2 weeks. Taking the process from 3 to 5 hours to under 15 minutes. If a parameter changed, rework to the spreadsheets took a minimum of another 2 hours, with the myDREAMware™ system, it could be done in less than 30 seconds and in real time.

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This is just a subset of the dozens of situations Nicholas has had spectacular results in over the course of his lifetime. Its not just something Nicholas St Jon does, its down to the very core of what he is.

Regardless of the industry, Nicholas has been specially gifted to see things a bit differently than most people do and has been given the ability to not only see what needs to be made more efficient, but to implement the systems to make them more efficient, virtually transparent to the team.

So whatever is causing you headaches, is a bottleneck, or you simply desire to make your company run more efficiently thus increasing profitability, Nicholas St Jon is your solution.

Consultants sometimes can be an expenditure rather than an Investment bringing you a good ROI, Nicholas is a Consultant for the 21st century, willing to share the risk of increasing your company's efficiency.

If you would like to experience The Nicholas Factor and have him work his magic for your company too, call and make an appointment!

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