

Engineering Services Unlimited, Inc. (ESU)

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The case describes strategic and operating decisions that face many young companies and small business persons. The case focuses on growth strategy of ESU. The first page gives a personal vignette about the principal character, Jerry Brooks, President and CEO of ESU. This vignette can be used to discuss differences between corporate managers and entrepreneurs. Of particular interest are the problems that a "fast-track" manager/entrepreneur may encounter as he or she tries to grow a company in a very competitive political government market arena. ESU found it nerve breaking trying to penetrate a competitive market environment that is crowded with many intensive rivalries. The case provides the students an opportunity to perform in-depth, comprehensive external and internal environmental analysis. The primary purpose of this case is twofold, namely:

- *the development of a business level strategy for a small firm, and*
 - *consideration of the business owner to diversify the company when the business owner concludes that the business no longer fits or is no longer an attractive investment*
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BACKGROUND

It's 1980 and the Oakland Raiders are playing the Philadelphia Eagles in the Fifteenth Annual NFL Sunday Super Bowl Game. Many times as he often did before, young Jerry Brooks sat in front of the television taking in the details of the game. Suddenly, he sits staring wide-eyed with interest at a commercial that is airing before him. A 17 year old boy is trading in his tennis shoes and street clothes for a different kind of uniform, a uniform of honor, the uniform of the United States Army. The commercial touts that with the honor of donning this uniform, comes the privilege to have "Uncle Sam" pay for ones college education.

Jerry knew that this was just the opportunity he was seeking for his ticket to college. Jerry's parents were hardworking individuals, but money was scarcely available to send him to school. Jerry had always been a hardworking young man as well, graduating high school early at the age of 17, and his goals and aspirations reached far beyond that of simply staying at home and working. With this thought in mind,

Jerry pursued the goal of joining the United States Army.

At 17, Jerry was just under the age to sign up for the Army independently. Therefore, his mother accompanied him to the Army recruiter's office and signed on the dotted line for her son. The principles and knowledge Jerry would gain as a soldier in the United States Army would shape and direct his future for years to come.

The minute Jerry decided to join the Army, he began to formulate a plan for his life. Eventually, he knew that he wanted to own his own business, but for the time being, he concentrated on a 3 year plan and a 5 year plan for his life. His plan called for him to serve in the Army for exactly 3 years, get the Army's college fund and return home to Alabama to attend college. The following 2 years, he would spend finishing his college career at the school of his choice. However, life has a funny way of leading you in directions that are invariably different from where you see yourself going. Instead of waiting to go to school after his 3 years were up, Jerry began taking advantage of night school as soon as he entered the Army. The Army had a program where they paid 90% of a soldier's tuition.

At the 3 year mark in Jerry's military career, he was stationed in Fort Bliss, Texas and he was offered the opportunity to work as a Patriot Missile Operator on the new and innovative Patriot Missile Systems. It wasn't long before the Army recognized the makings of a true soldier in Jerry, and asked him to extend his stint from 3 years to 5 years to accommodate a new ship tour which deployed to Germany. It was during this 2 year stint in Germany that Jerry would couple the leadership values that his parents had instilled in him with the Army's spirit of invincibility, to drive himself to believe that he could do anything that he put his mind to. Jerry believed that there was nothing in life he couldn't do.

Consequently, when his 5 year tour in the Army was up, Jerry found himself at a veritable crossroads of sorts. Within this time, Jerry had finished a 4 year college degree by attending school and studying on nights and weekends, he had worked on the illustrious Patriot Missile Systems, and he had traveled the world; all by the young age of 22. Not to mention he was also one of the youngest Staff Sergeants in the military ranks.

While other young men were graduating from college and looking for jobs, Jerry was being offered the opportunity to attend Officer Cadet School. Realizing that his 5 year plan was up and that he had accomplished everything he had endeavored to do, Jerry set out to learn to lead troops at Fort Benning, Georgia's Officer Cadet School. It was in Officer Cadet School that Jerry really had the opportunity to draw on his

college education and his military experience to develop real leadership skills.

Jerry spent 5 more years as an enlisted man in the United States Army. Within this time, he became a Captain in the Army, led soldiers in the conflict with Desert Storm and became an expert in the testing and analysis of the Patriot Missile Systems. Still, with all of these accomplishments under his belt, something was missing. Being a professional soldier was commendable to say the least, but in his heart, Jerry felt a familiar void; the void that could only be filled by being a contributing part of his hometown community and starting his own business.

The Army began offering early retirement to men who had served 10 years or more and Jerry saw this as his break to integrate back into civilian society and build-up capital for his new business. Many of his superiors and counterparts attempted to talk him out of leaving the Army, however after careful consideration and a good deal of soul searching, Jerry Brooks made the decision to become a civilian and an entrepreneur. In 1990, with the support of his wife and family, Jerry began the long journey towards successful entrepreneurship.

THE TRANSITION

Financially, the transition period between military life and civilian life was somewhat strained for Jerry and his family. The pension provided by the government was sufficient for covering basic necessities, but it left little extra for investment in extracurricular family activities and the new business. Jerry's goal then became to get his emerging business up and running and return his family to the lifestyle they were accustomed to.

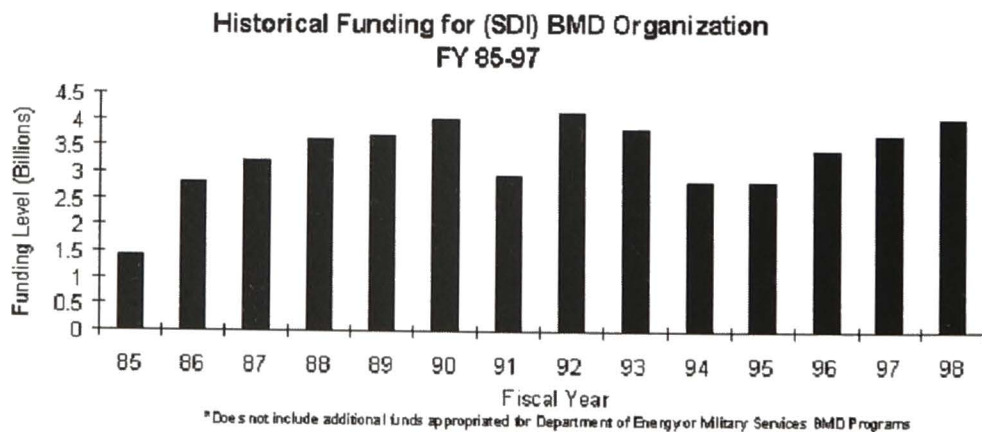
The physical and social shift from Army life to civilian life was anything but easy. Jerry's first day as a civilian would be one that he would remember as the longest day of his life, for the rest of his life. The statement "the Army does more before 9:00 a.m. than most people do in an entire day" rang true in Jerry's ears. There it was 9:00 a.m. and Jerry was wondering if the day would ever end! The energy and drive he relied upon each and every day to fuel his life as a soldier, would now have to serve as the driving force behind his new business. Keying in on the new Patriot Missiles Systems industry seemed to be the most logical choice of business for Jerry, thus in 1992, Engineering Services Unlimited (ESU, Inc.) was born.

FUNDING FOR THE PATRIOT MISSILE

While in the military, Jerry had participated in the very first Patriot Missile launch at White Sands, New Mexico and was involved in the early testing and developmental stages. Jerry became an expert in Patriot Missile Systems operations by the time he

was 22 years of age. However, even with all of his expertise and know-how, breaking into the Huntsville, Alabama military market arena proved to be more of a challenge than Jerry had envisioned.

After Operation Desert Storm, policymakers throughout the Government continued to assess the Patriot as a highly effective missile defense system. This support helped justify budget requests for additional improvements to the Patriot system, funding increases in the Strategic Defense Initiative (SDI), and plans to proceed with a limited strategic missile defense of the United States. However, confusion over the Patriot's performance fueled overly optimistic estimates of the effectiveness of new, proposed defensive systems. The Army evaluation of the Patriot Missile System was performed by a small team of nine officials from the Patriot Program Office and related Army offices and others from the prime contractor on the program, the Raytheon Company. On average, between three and nine Raytheon personnel supported the Army in the post-war performance analysis and approximately twelve Raytheon personnel provided support to the Army in Saudi Arabia and Israel in analyzing Patriot performance and operations. The Army paid Raytheon \$520,000 to provide analysis of Patriot performance in the war.



As information from all sources became available, software changes were made from August 1990 to February 1991 by the Patriot Project Office in Huntsville, Alabama, to adapt the system to the Desert Storm environment. During the conflict, the Patriot's software was modified six times. Patriots had to be shut down for at least 1 to 2 hours to install each software modification.

The Role of Alabama in the Defense Industry

As Alabama's role in the defense industry has grown, so has the availability of contracting opportunities for highly specialized defense companies in the area. For instance, from 1991-1994 more than a whopping \$4.7 billion dollars in contracts were awarded to defense contractors just by the Army alone. The largest portion of those dollars were spent right here in the city of Huntsville, Alabama where Jerry Brooks and ESU, Inc. had made its home.

His first attempt at marketing to the Patriot Missile Project Office in 1992 was met with staunch resistance. Public opinion was that a black man such as himself, should not be so dangerously close to such sensitive and high-powered information. Instead of offering ESU contracts, Jerry found people calling him and asking for free information. Once Jerry would assist them with their situation over the phone, he would then tell them that he could fix any and all problems they were having with testing and analysis of the system, if they would simply offer him a contract. Even though Jerry was one of the first companies in the Huntsville area to get an 8(a) technical certification in 1994, work was still very hard to come by. In addition, Jerry had also become certified as a Disadvantaged Business Enterprise in 1995 to increase his chances of winning set-aside contracts. Several times Jerry came painstakingly close to getting a contract opportunity from the Patriot Missile office, but he never saw an opportunity materialize within the first year of operation. It was at this point that Jerry realized his opportunity was going to have to come by way of connections he had made while serving in the United States Army.

THE PATRIOT MISSILE SYSTEM

Figure 1 and Figure 2 depict the Patriot Missile. This missile was the replacement for the Nike Hercules and Improved Hawk air defense missile systems which were in operation from 1955 until the early 70's. Initially, Patriot was known as SAM-D until the 1990's when it was successfully modified to intercept tactical ballistic missiles. Patriot Missiles were designed to defend against high performance air-breathing targets. The system can simultaneously acquire, identify, track and destroy multiple targets. Each launcher can carry four missiles which are protected in their shipping containers.



**Figure 1: Patriot Missile w/
Launcher**



Figure 2: Patriot Missile

The Patriot operates as part of a battalion usually composed of six batteries. Each battery is made up of a ground-based radar unit for surveillance and target detection, tracking, and engagement, an Engagement Control Station for manual or automated command and control of the missile interceptors, eight missile launchers, and Communications Relay Group for communications support. An Information Coordination Center controls the batteries and coordinates their operation with other battalions and higher level U.S. Command authorities.

The heart of the Patriot system is its weapons control computer. It performs the system's major functions for tracking and intercepting a target, as well as other battle management, command and control functions. The Patriot's weapons control computer used in Operation Desert Storm is based on a 1970's design with relatively limited capability to perform high precision calculations.

To carry out its mission, the Patriot's weapons control computer obtains target information from the system's radar. The Patriot's radar sends out electronic pulses that scan the air space above it. When the pulses hit a target they are reflected back to the radar system and shown as an object (or plot) on the Patriot's display screens. Patriot operators use the software to instruct the system to intercept certain types of objects such as planes, cruise missiles, or tactical ballistic missiles (such as Scuds). During Desert Storm the Patriot was instructed to intercept tactical ballistic missiles. For the Patriot's computer to identify, track, and intercept these missiles, important information describing them was kept by the system's range-gate algorithm.

After the Patriot's radar detects an airborne object that has the characteristics of a Scud, the range gate—an electronic detection device within the radar system—calculates an area in the air space where the system should next look for it. The range gate filters out information about airborne objects outside its calculated area and only

processes the information needed for tracking, targeting, and intercepting Scuds. Finding an object within the calculated range gate area confirms that it is a Scud missile. With this information, the missile can then lock onto its target and make a "hit and kill" shot.

Month after month Jerry marketed himself and ESU, Inc. to the defense industry to no avail. Finally, after working so diligently to get the word out about ESU's analysis and testing capabilities concerning the Patriot System, a Colonel that Jerry served with at Ft. Bliss, Texas who was now involved with the Space and Strategic Defense Command gave ESU, Inc. a shot. This first contract for a Test Bed worth \$1.5 million was the first step in ESU's foundation to building a global presence.

ESU DIVERSIFICATION EFFORTS

At this juncture, a great deal of Jerry's colleagues were beginning to sit in some of the defense industry's top-notch, high-powered, decision making offices and they were not afraid to give ESU, Inc. a chance at proving themselves in the Patriot Missile industry. Little by little, Jerry began to see Patriot System contracts come into his hands. Of course, each step along the way was fraught with obstacles and hurdles that he had to overcome, and as a result Jerry's mind began to think much broader than the borders of Huntsville, Alabama. He began to see the big picture of the almighty defense dollar. Defense dollars are cyclical, usually lasting for a period of 5 years. Jerry had observed companies that were in the cycle of the defense industry for 5 years and then all of a sudden, they were out. Jerry longed for his company to be involved in an industry where contracts would be readily available and the need to jump through so many "bureaucratic hoops" would be next to nil.

Now that there was a foundation under ESU, Inc. and Jerry had succeeded in building a viable reputation for himself as an entrepreneur, he began to divert his attention to bidding for items that had nothing to do with the Patriot Missile System. Over the previous 5 years, Jerry had increased the number of proposal dollars that were coming in and also managed to build a solid infrastructure. Jerry's diversification and forward thinking moved ESU away from the Patriot Missile Systems and into database management, logistics, programmatic and facility maintenance. Jerry would find that these newly identified capabilities would rely not so much on technical ability, but on his expertise in leadership, management and planning. Based on these skills, Jerry was awarded several contracts that would require him to operate offices in Alabama, New York and Puerto Rico.

Jerry found the ease of competing for contracts outside the constraints of Alabama's borders far more accommodating to his business. Whereas Alabama awarded

contracts based on “Past Performance”, places such as New York sometimes awarded contracts based on “Best Value” or the best way to improve upon an existing process. The statement of work for the contract based out of New York called for Facility Management Services at 14 government locations with tasks that included maintenance of all automated card readers, entry control, LAN/WAN maintenance as well as Networking. This first contract was worth \$25 million over a period of 5 years. From the outset, Jerry had only 8 employees while working on the Patriot Missile System. With this contract came the need for a staff that was 225 persons strong.

The obstacles Jerry faced while doing business in New York and Puerto Rico were somewhat different from those he faced in Alabama. Instead of being excluded from business because of his race and high level of technical knowledge, he found himself embraced by the New York business community because of his differences. Even the twang of his southern drawl was a point of interest not only for his counterparts but for the New York mafia who simply wanted a piece of the pie that Jerry had so neatly carved out for himself and ESU. The relationship between employees of different races was also another hurdle that Jerry had to address and overcome. The leadership skills he had mastered in the Army were instrumental in solving the problems between his employees and ensuring that the common goal of providing technical services was intact. One likeness Jerry did find between doing business in Alabama with the Patriot Missile Systems and the New York operations was the high level of overhead costs that ESU incurred. By anyone’s opinion, Jerry and ESU were doing quite well, but Jerry still longed for an industry where the margins would be higher and the level of personal satisfaction would be greater.

THE NEW KID IN JERRY’S LIFE

Jerry realized that the contracts he had been awarded were his bread and butter, but what would he do in four years when they were up for recompetition? It was this thought that prompted Jerry to investigate other avenues of business. While promoting ESU’s capabilities at the 2002 Black MBA Conference in Nashville, Tennessee, Jerry began to poll a few of the businesses he came into contact with. He asked them if there was one thing they would want to see created for the benefit of their businesses, what would it be? Each and every one of the companies responded the same: they would love to see a company provide a web-based clearinghouse of qualified and well-screened diversity candidates for positions within their companies. Immediately the wheels of Jerry’s mind began to turn thinking on how he could provide this much desired service for these companies.

Jerry began the arduous task of researching the current providers of diversity can-

didates. In a word, he began sizing up his would-be competitors. Among them were such well-known names as Monster.com, LATPRO and IM Diversities. Monsters' attempt at expanding into the diversity realm had been a botched one. Many candidates would decline to indicate their race when submitting their credentials to the website, for fear of being black-balled due to race. However, LATPRO and IM Diversities had both succeeded in building a reputable name for themselves as providers of stellar diversity candidates. With over 12,144, 000 clients, LATPRO was the biggest provider of qualified Latin American candidates in the world. IM Diversities was in a close second with approximately 12,000,000 candidates from various diverse backgrounds. As Jerry researched the industry more and more closely, he began to realize the vast market potential that existed concerning the provision of diversity candidates. It was at this junction that Diversity Employment Solutions (DES) and Jerry's quest to "build a better Monster" was born.

Candidates that were searching for professional jobs could enter their work experience and education into a database that would store the information until a potential employer began searching for a person with their qualifications. This was at no cost to the candidate. Once a match had been determined, the Website would then invite the candidate to a telephone interview with the company or companies that had found an interest in his or her background. Conversely, companies who were seeking qualified candidates could enter the appropriate criteria for a prospective employee and within minutes receive a number of matches based on educational or work experience key words. The company pays an annual fee of \$7,500 to DES for unlimited access to all of the candidates in DES' database.

ESU IS SOLD

In 2002, Jerry began to seriously entertain calls that he had received in reference to selling ESU, Inc. Whereas, he would once tell the callers he wasn't interested, the prospect of selling ESU and investing the capital in DES, Inc. was sounding more and more appealing. A large conglomerate company out of Knoxville, Tennessee won Jerry's interest with their offer to buy ESU. With a number of contracts still on the table, Jerry knew that the conglomerate was interested in more than just the name that ESU had made for itself. In August of 2002 Jerry sold ESU, Inc. in a structured buyout worth almost \$2.0 million inclusive of rights to the purchase a number of bulletin board stocks and all equipment and mechanical developments. Fifty percent of the buyout was an upfront cash payment, 25% of the buyout amount was to be paid over the next 12 months, and the remaining 25% was given as stock options. A portion of the capital Jerry received from selling off ESU was used to position DES to compete with the larger companies like Monster.com, LATPRO and IM Diversities. This positioning included establishing a top notch web-site with one of

the best web ratings and number of hits of any of Jerry's competitors. Perhaps the best investment that Jerry made in reference to his website, was in a company called Alexa.com. Alexa.com is a web oriented company which assists other companies in building a web presence. Alexa.com was also a great marketing tool for Jerry. When companies would ask why they should select DES as their diversity candidate provider, Jerry would tell them all about his Alexa.com web rating.

While the defense industry contracts provided Jerry with a margin of 11-12%, DES yielded an average margin of 38%. Within 8 months of launching his website, Jerry's website had become the most visited of any of the diversity providers. This increased visitation manifested itself in the form of revenue. Just in those 8 months alone, Jerry raked in \$750,000 by selling 100 of his \$7,500 packages. If this trend continues, Jerry can expect to clear an additional \$375,000 by the close of the year 2003.