Optimax Systems, Inc.: A Mission That Includes Enabling Prosperity for Employees
Optimax Systems, Inc., located in upstate New York, is a privately held precision optics manufacturer founded in the early 1990s. According to Optimax CEO Rick Plympton, the company’s mission is to enable both customer success and employee prosperity. As part of that mission, Plympton explains, the company invests in technology, invests in its employees, and ensures that employees share in the company’s profits.

Optimax was one of the first companies in its industry to adopt a breakthrough computer-controlled technology for grinding and polishing lenses, allowing it to offer expedited delivery services to its customers. From the company’s early days, when it was launched in the basement of a barn as a nine-person shop, Optimax has expanded substantially by continuing to innovate and becoming smarter, faster, and more precise.

Optimax Systems, Inc.

Key facts:

Ontario, NY • Founded 1991 • Privately held

• Precision optics manufacturer specializing in asphere, cylinder, sphere, and plano/flat optics in sizes up to 400mm • Facility Size: 120,000 sq. ft.

• 2019 Revenue: $ 48 Million • 3-Year Growth: 55%

• Employees: 400+ • Opticians 200+

• President: Michael Mandina • CEO: Richard Plympton

• Mission Statement: Enabling customer success and employee prosperity
This path of continuous improvement has led Optimax to become America’s largest prototype optics manufacturer today. The company operates out of a 120,000-square-foot facility and employs more than 400 people. Optimax had 2019 revenue of $48 million from a steady stream of defense, semiconductor, medical, and aerospace customers.

Having built a successful business, the company’s leadership team is committed to educating others about its management practices. Based on three key pillars, Optimax’s management philosophy is characterized by: (i) a dynamic, team-based culture, fostered by enlightened management practices; (ii) lean operations; and (iii) innovative approaches to training and retaining production employees.

1. Intentional Culture
Since the early days of the company, Optimax’s President Michael Mandina and CEO Plympton have been very intentional in creating a corporate culture that reflects their values and can be seen as an extension of their combined personalities. Both men come from blue-collar backgrounds, and they both started their careers on the production floor before working their way up. While they were technicians, they pursued engineering degrees, and later MBAs, as their business management responsibilities grew. Mandina and Plympton are very hands-on and place a high value on relationships, both inside and outside the company. Both men believe in the power of teams. “It is not about 1-2 people doing heroics; it’s about the whole team working together,” says CEO Plympton. Reinforcing this team culture are two key practices established more than two decades ago: a reward-oriented bonus structure and a comprehensive performance review system.

**Bonuses That Drive Behavior**
In the mid-1990s, Optimax’s leaders developed a bonus structure that is built on a high degree of transparency and information-sharing. Every month, the company’s leadership and employees review the organization’s performance together in an all-staff meeting, discussing topics such as sales, on-time delivery, future orders, etc. If the company was profitable that month, management distributes 25% of those profits amongst the workforce, using a formula based on wages and length of service. The company’s leaders have found that the monthly bonus structure influences employees’ daily behaviors much
more than annual bonuses. “Each month, employees look at our performance; they know what is important. We are much more focused on our performance metrics and understand that we must provide 100% quality and on-time delivery to our customers every single day,” says Plympton. Furthermore, he notes, wealth is being shared with the workforce as it is generated.

**Team Peer Reviews**

In many companies, it is not unusual for top management to undergo 360-degree peer reviews. What distinguishes Optimax is that all employees, hourly and salary, participate in annual peer reviews—a practice almost unheard of in the industry. In this process, the key question is not “Am I satisfying my supervisor?” but “Am I satisfying my team, and what can I learn to create more value?”

These peer reviews are based upon a process developed in-house that assesses essential skills, aptitudes, and interpersonal relations. As part of the process, employees create an Individual Learning Plan outlining their career interests and identifying future development opportunities. This review allows managers to provide valuable feedback, establish goals, and ensure that everyone—team members and supervisors—understand their roles and expectations.

Managers sit down with each of their direct reports and discuss the feedback received from several of the employee’s peers on the employee’s particular strengths, performance as a team member, and areas for improvement.

Employees are responsible for doing their best each day and learning to become a stronger team member. They are also responsible for helping their peers learn and grow.

2. **Lean Manufacturing and Standardized Work Procedures**

Years ago, Optimax adopted a lean manufacturing approach, derived mostly from the Toyota Production System (TPS). This approach emphasizes continuous improvement, respect for people, and teamwork. As part of its lean
manufacturing approach, Optimax’s operation is driven by cross-functional cells, each one manufacturing lenses of different sizes and shapes. To meet their demanding production schedules, cell members, at all levels, must be knowledgeable of the entire manufacturing process and continuously seek to identify improvements to the standard work processes.

To support improvements for the lean cells, communities of practice have been developed. These communities of practice include: IT for custom software solutions; Continuous Improvement Engineering to work on efficiency and throughput; Metrology to improve accuracy and repeatability; and HR, also known as the OWL (Optimax Way of Life) Group.

To enable this approach, Optimax spends a great deal of time documenting, creating, and updating its standard work procedures. For a number of years, the firm has held internal training on continuous improvement. Through this training, employees learn to identify the practices that create true value as well as those that don’t, in order to cut out areas of waste. These efforts have resulted in better processes, leading to savings and higher profits.

By detailing specific work processes for running certain parts and training employees, Optimax has eliminated wasted time and material and created the opportunity to start and finish more projects consistently. The creation of standard work methods allows employees to better predict when a part will be finished, which, in turn, drives out cost and gives the opticians greater confidence in meeting deadlines, thus increasing the satisfaction of both customers and staff.

3. Developing and Retaining Talent
Optimax’s recruiting and workforce development strategies mirror its team-based culture. A small, lean management team guides a workforce of more than 400 employees that consists primarily of opticians, technicians, and engineers.
Optimax technicians grind and polish optical materials such as glass, crystal, ceramic, and stainless steel and produce components up to 500 millimeters in diameter; 80% of the company’s business involves optics that measure 20 to 200 millimeters in diameter. To handle this detailed precision work involving the latest technology requires a skilled workforce. CEO Plympton says the company must hire “technicians for the 21st century. These are the people who can program computerized machinery and have strong math, science, and communication skills.”

To keep and further develop its workforce, Optimax relies on a number of different mechanisms:

First, standardized work processes and internal training systems allow the company to grow from within and retain skilled employees. To further these objectives, Optimax asks all new hires to take a simple personality test that helps identify innate strengths. In addition, the company provides an extensive and structured set of activities in which all hourly production employees participate: mentoring, on-the-job training (including in lean manufacturing), and external development. Currently, Optimax invests approximately 2% of its annual revenue on training and workforce development.

**Mentoring:** Core to the developmental process at Optimax is the mentoring program. Designed to help employees learn about, and feel more comfortable in, Optimax’s culture, the mentoring program is designed to give new employees a safe place to ask questions and a chance to build a trusting relationship with another coworker. All new employees are assigned a mentor for a minimum of 90 days, and there is a structured timeline of events that are expected to take place during this time period, including: much one-on-one time, monthly lunches, introductions to other employees, orientation to computer systems, understanding the bonus program, etc. “Instead of a boring HR orientation, this mentoring relationship helps new employees understand our environment and what is expected in a far more effective manner,” says Optimax HR Manager Alejandro Mendoza.

**On-the-Job Training:** The most intensive skills training and knowledge-sharing takes place primarily within the work cells. Each cell has a specific training time table detailing the core skills, proficiency
levels, and instructions associated with every aspect of manufacturing a particular optic, from polishing and machining to inspection. Employees are thus able to move from cell to cell proficient in the different work processes and can expect to receive wage increases as they acquire additional skills.

Optimax has developed a Team Leadership Program to help technicians who are promoted to managerial roles cope with personnel management responsibilities and learn team-building concepts and strategies for “modeling the way.” The company also has a “Read to Lead” program, where employees read books about management and then discuss their insights in small groups.

External Development: When recruiting new employees, the company makes it very clear that Optimax is looking for individuals who are not afraid to continue with their formal education. Indeed, Optimax will reimburse tuition expenses for approved classes for up to $5,000 per employee annually. Since 2001, when the company started tracking its tuition payments, it has paid out almost $1,000,000. In large part, this tuition has been used to send opticians to technical schools to develop new skills and knowledge. On average, 20 employees per year are sent to various classes and degree completion programs. Additionally, several years ago, the company began offering an in-house apprenticeship program in precision optics manufacturing. Optimax takes advantage of a variety of state subsidies to offset the cost of on-site training of hourly employees in areas such as analytic troubleshooting, project management, presentation skills, various computerized machinery, and other technical courses.

Regional Collaborations and Partnerships
Optimax also relies on regional collaborations and partnerships with local government, colleges, and industry to develop skilled workers. The leadership team at Optimax has long been active in the community and is committed to strengthening the manufacturing base in upstate New York by building strong relationships with area high schools and colleges to ensure a workforce pipeline of graduates with an interest in manufacturing.

In 2007, Optimax President Michael Mandina helped launch FAME (Finger Lakes Advanced Manufacturers’
Enterprise), an industry-led workforce development cluster that works in partnership with the region’s Workforce Investment Boards. FAME brings together small and mid-sized manufacturing companies to promote advanced manufacturing and address shared concerns specifically related to the shortage of skilled workers. “There are 1,500 manufacturing firms in the region and a broad initiative to develop 21st-century technicians was missing,” says Mandina. “Promoting jobs for optics technicians was not enough. Enrollment in our area community colleges’ technology programs was declining; a broader effort was needed to increase the number of candidates.” Due to FAME’s efforts, enrollment in the community colleges’ technology programs has been steadily increasing.

In 2010, FAME was instrumental in launching the first industry-certified optics training and job placement program, customized specifically for optics manufacturers in the greater Rochester area. Optics is a fast-growing industry in the area, especially in high-precision, low-volume niche production. The program, which bundles existing courses in optical systems technology and precision machining, enables students to pursue jobs in either industry, allows for an easier transition of workers already skilled in precision machining into the optics industry, and trains men and women who want to get into the workforce quickly. Training funds to participate in the program are made available to eligible candidates through the area workforce development board. Successful completion of the for-credit program gives its participants an industry-approved certification.

Optimax’s own apprenticeship program in precision optics manufacturing (POM) is a three-year program that is a registered apprenticeship program with the State of New York. The Optimax POM apprenticeship program combines job rotations in every part of the company with a requirement that participants take two optics-related classes a year at a community college. For participants, one benefit is that the apprenticeship program involves salary increases every six months; the company, in turn, benefits from developing well-rounded, knowledgeable employees who understand different aspects of the business. “Having a pathway that teaches a technician all of the elements of the business is critical,” says Mendoza.
Keeping Fun Part of the Equation
If it seems that Optimax is all about work, continuous learning, and metrics, think again. This is also a workplace where folks like to play—starting with the CEO. More comfortable in a tie-dye T-shirt (the company’s signature uniform) than a three-piece suit, CEO Plympton loves to kid around. “I really still consider myself a big kid,” he says. Over time, some of the faces at the company have changed, but one important goal remains the same—to make sure that "fun" stays part of life at Optimax. That’s why the company has an employee Fun & Wellness Committee to plan events each month that give employees an opportunity to socialize together. Having fun, building relationships, and growing community are all important components of Optimax’s team-oriented culture.

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Benefits at a Glance

Tuition Assistance:
Reimbursement of up to $5000/year of preapproved educational expenses

401(k) Plan

Bonus Profit-Sharing Plan:
Monthly disbursement of 25% of company’s pretax profits

Health and Dental Insurance: Company pays 50% of premium

Holiday Pay: Six days paid, plus three designated floating days paid

Personal Time Off: All employees accrue 80 hours of paid time off their first year, and that amount increases over time for employees with longer tenure

Short-Term and Long-Term Disability Insurance

Term Life & Accidental Death and Dismemberment Insurance

Employee Assistance Program (EAP): Free, confidential professional consultation for personal or family problems