
IBS Center for Management Research

Dr. V of Aravind Eye Hospital: A 'Level 5' Leader

*This case was written by **Anil Kumar Kartam**, under the direction of **Sanjib Dutta**, IBS Center for Management Research. It was compiled from published sources, and is intended to be used as a basis for class discussion rather than to illustrate either effective or ineffective handling of a management situation.*

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Dr. V of Aravind Eye Hospital: A 'Level 5' Leader

"In America, there are powerful marketing devices to sell products like Coca-Cola and hamburgers. All I want to sell is good eyesight, and there are millions of people who need it."

-Dr. Govindappa Venkataswamy (Dr. V), Founder of Aravind Eye Hospital¹.

"Leadership is a personal quest you undertake, one based on a mission that troubles your heart."

-Harriet Rubin, a senior writer at Fast Company, referring to Dr V².

INTRODUCTION

Imagine an organization giving eyesight to 13 million people, an organization performing nearly 1.8 million surgeries in a span of 26 years. The organization in question is the Madurai (a town in Southern India)-based Aravind Eye Hospital (Aravind). (Refer Exhibit I for locations of Aravind hospitals). This organization was the single largest cataract³ surgery provider in the world in 2003. While a cataract surgery costs US\$ 1650 in a US hospital, Aravind performed the same quality surgery in India, at US\$ 10⁴. The manufacturing division of the hospital, Aurolab, was one of the leading manufacturers of intraocular lenses⁵ (IOLs) in the world. In 2003, the division held a 10 percent share of the global market in IOLs. While other manufacturers such as American Ophthalmic Laboratories, US IOL Inc sold these lens at \$100-\$150 a piece, Aurolab sold the same quality of lens at US\$4 - \$6 per lens.

Though Aravind offered free service to nearly 70 percent⁶ of its patients, it was still able to maintain profit margins of 40%⁷. At Aravind, the third (1/3) of the patients who could afford to pay for the services they received subsidized the rest (2/3) of the patients who could not. This was a revolutionary concept in the field of health care. Aravind did not intend to limit its model to India alone. It had plans to establish hospitals in southeast Asia and Africa. Aravind's avowed fight seemed to be with blindness - wherever it was, and whatever it took.

The man behind the success of this hospital was its founder - Dr. Govindappa Venkataswamy, reverentially called Dr. V (Refer Exhibits II & III for a list of his major research, clinical and management contributions, and awards and honors offered in recognition of his services).

¹ William McDonough, *How much can we give for all we get?* MBDC Monthly feature, May 2003.

² Harriet Rubin, *The perfect vision of Dr. V*, Fast Company, Issue 43, February 2001.

³ Cataract is a condition where the lens of the eye becomes cloudy and opaque due to old age or diabetes, thus failing to transmit light to the retina. The clouded lens leads to blindness. In a cataract surgery cataract is removed and an intra-ocular lens (IOL) is implanted in its place to restore vision.

⁴ *Aravind eye hospitals*, Social Entrepreneurship, Greenblue.org.

⁵ The IOL is a tiny, transparent, convex lens made of polymethyl methacrylate, a harmless plastic substance. IOL is extremely beneficial for a cataract patient as it eliminates the use of heavy spectacles with thick lenses after the operation. An IOL assures clearer vision without any distortion. It also facilitates speedy recovery of the patient after an operation.

⁶ Pravir Malik, *Emergence of the fractal savant*, Business Line, December 30, 2003.

⁷ William McDonough, *How much can we give for all we get?* MBDC Monthly feature, May 2003.

‘CRUCIBLES OF LEADERSHIP’⁸

Dr. V was born into a farmer's family on October 1, 1918 in Vadamalpuram (a village 80 km from Madurai). The village had no school and as a boy, Dr. V had to undertake household chores before walking to a school that was 3 miles away from his village. Later, a school was opened in his village but it did not have pencils, pens, or even slates to write on. The children had to bring sand from the river bed and spread it smoothly on the mud floor and then learn to write on the sand with their fingers.

Dr V's father was a Gandhian⁹. Naturally, as a child he imbibed the Gandhian values of nonviolence and truthfulness. In his school days, Dr. V was inspired by Swami Vivekananda¹⁰ and later when he was pursuing his higher studies he was influenced by Gandhi.

Dr. V decided to study obstetrics,¹¹ when three of his cousins died of eclampsia (an attack of convulsions) in last months of their pregnancy. In 1944, he completed his medical education from Stanley Medical College, Chennai¹². Soon after finishing his degree, he joined the Indian Army Medical Corps. The next year until the end of the Second World War, was an eventful one for Dr. V. But soon after the war, he suffered from rheumatoid arthritis, which permanently twisted his fingers, and made him bedridden. The next two years Dr. V went through excruciating physical pain. He said of these two years: "I would scream in pain if someone as much as touched the bed. It was torture."¹³

Dr. V had to endure not just physical pain, but also a feeling of hopelessness. He could no longer be an obstetrician with his disfigured fingers. He was brought up in an environment that valued achievement (though not materialistic). But he could barely move, leave alone be an achiever. One fine day, overcoming the pain with sheer grit of will, he was able to stand. This was an exhilarating moment for him. "When I finally could stand, I felt as if I was on top of the Himalayas," he said.¹⁴

In 1950 Dr. V met Sri Aurobindo - a poet, philosopher, and sage. He was influenced deeply by him¹⁵. From him Dr. V learnt that "Evolution is the emancipation of a self-revealing Soul secret in Form and Force, the slow becoming of a Godhead, the growth of a Spirit. In this evolution mental man is not the goal and end, the completing value, the highest last significance; he is too small and imperfect to be the crown of all this travail of Nature. Man is not final, but a middle term only, a transitional being, an instrumental intermediate creature."¹⁶ Since then Dr. V came to believe that a new creature will result only when the body is healthy and perfect. With this idea as his guiding force, Dr V turned to ophthalmology.¹⁷ Then started his epic fight against blindness, which culminated in his work to restore eyesight to millions.

⁸ Crucibles are vessels used by medieval alchemists to convert ordinary metals into gold. A crucible in the above context refers to a transformative experience through which an individual comes to a new or an altered sense of identity. Warren Bennis used the term 'crucible' for the first time in the context of leadership.

⁹ A follower of Mahatma Gandhi's (the 'father of India's freedom struggle') values.

¹⁰ Swami Vivekananda was the most forceful spiritual personality in India in the 19th century.

¹¹ The branch of medicine that deals with the care of women during pregnancy and childbirth.

¹² Capital of the Tamil Nadu state, earlier known as Madras.

¹³ Harriet Rubin, *The perfect vision of Dr. V*, Fast Company, Issue 43, February 2001.

¹⁴ Harriet Rubin, *The perfect vision of Dr. V*, Fast Company, Issue 43, February 2001.

¹⁵ G Sankaranarayanan, *The man and vision behind Aravind Eye Hospital*, Express Health care management, 1-15 Sept 2003.

¹⁶ Sri Aurobindo, *The evolution of consciousness*, The Bulletin of Sri Aurobindo International Centre of Education, November 1976.

¹⁷ The branch of medicine that deals with the structure, functions and diseases of the human eye.

Dr. V went to a medical school once again, and completed a Masters in Ophthalmology in 1955. The standard instruments used in eye surgeries did not fit well in his disfigured fingers. As a result, he had to design his own instruments. In 1956 he joined the Government Erskine Hospital, Madurai as an eye surgeon (Refer Exhibit IV for his pioneering contributions at this hospital). Doing 100 cataract surgeries a day, he quickly became an efficient eye surgeon. He also worked as a faculty member at Madurai Medical College. He joined the college as the head of the department of ophthalmology in 1956 and later served as the vice dean. When he retired in 1976 after serving for 20 years, he was the most admired eye surgeon in India¹⁸.

At the age of 55, Dr. V first saw the golden arches of McDonald's. That was the beginning of his dream to give eyesight to millions. He reasoned when McDonald's could sell billions of low-cost burgers, he could also sell millions of low-cost sight-restoring operations.

In 1978, Dr. V started Aravind after mortgaging his house (Refer Exhibit V for Aravind's mission). It had 12 beds then. By the end of 2003, this hospital was offering ultra-modern facilities and 3000 beds (Refer Exhibits VI and VII for the services offered by the hospital and statistics).

INSPIRING STANDARDS WITH INTENSE WILL

An incident at Aravind makes clear the intense will of Dr. V. One day, Usha, a surgeon who held a record at Aravind for the number of surgeries in a day (155), returned from a village camp¹⁹ running a fever of 102 degree Fahrenheit and checked herself into the hospital. Dr. V arrived at the hospital, as a part of his duty, and noticed her in the hospital. "What are you doing here?" he asked. "I am sick", she replied. Dr V said, "My fever is 104. How high is yours?"²⁰ She had no option but to get out of bed and go to work. The same will made him one of the most respected eye surgeons in the world in spite of his physical limitations. It was this intense will that led him to mortgage his house to set up Aravind hospital, in pursuit of his dream.

C K Prahalad, a leading management thinker, has studied Aravind's operations over the years. He observed that Aravind generated a 200 percent return on capital employed. "We have a good medicine school at the University of Michigan, and they are amazed by what they saw at Aravind. It is better than the best," he said, in appreciation of the functioning of Aravind²¹. According to him, Aravind was a market-driving entity²². It was a market-driving entity because it served the most unserved market - the poor. The poor in India could rarely afford good eye health care, leave alone eye surgeries. For them a cataract meant blindness, and often, great suffering in their lives. They did not know that they could regain their eyesight with a 15-minute surgery (at Aravind a cataract surgery on an average took 10 to 20 minutes). Dr. V explained his marketing philosophy "Give people a new experience, one that deeply changes their lives, make it affordable, and eventually you change the whole world. And your customers become your marketers."²³

Dr. V had to first educate his potential customers. He encouraged doctors and technicians to undertake community work regularly. As a part of this work, a representative from Aravind visited the village where the doctors intended to organize a weekend camp, and met the village heads. With their help, the representative designed a plan for conducting the camp. Once the details were finalized, doctors and technicians visited the village (sometimes they travelled days together to reach remote villages). Once they were in the camp they worked round the clock, testing people and identifying patients who need to be taken to Aravind at Madurai for surgery.

¹⁸ GreenBlue.com

¹⁹ Aravind runs village camps for the benefit of patients who cannot come to hospital.

²⁰ Harriet Rubin, *The perfect vision of Dr. V*, Fast Company, Issue 43, February 2001.

²¹ B Surender, *The world's most efficient doctor*, Mansworldindia.com.

²² A market-driving entity creates a need that did not exist before. Market-driving organizations are guided by a vision or radical idea rather than market research.

²³ sulekha.com.

Under the Dr. V's leadership, Aravind managed to provide inexpensive eye care services by pruning its costs diligently. Even operating theatres and surgery procedures were designed to enhance the productivity levels of surgeons. Dr. V kept costs low by building an efficient, high-volume, assembly-line process to perform surgeries. Every step ranging from patient screening, registration, to surgery itself, was standardized.

Two or more patients were in the operation theatre at the same time. A doctor performed the cataract operation in 10 to 20 minutes and then moved on to another patient who was ready to be operated by the time he completed operating on the first patient.²⁴ Nearly 70% of the work in the operation theatre was done by paramedical staff. Each surgeon at Aravind teamed up with 4 nurses in the operation theatre: two running nurses²⁵ and two assisting nurses. More than the surgeon's skill, it was Aravind's system of 4 nurses for each surgeon (the same nurses to the same surgeon each time) that gave the most advantage²⁶. This process maximized the time a surgeon spent on surgery. As a result, doctors could concentrate only on surgery and perform a larger number of surgeries. Observed Dr Krishan Das, a surgeon at Aravind, "The fixed team makes things easy for the surgeon and the nurses. There is better understanding. Also, in a difficult situation, they know how to bail me out."²⁷

Keeping two patients in the same operation theatre is prohibited in most US hospitals. This is done as a precautionary measure to avoid infection. However, at Aravind, doctors have never come across any problem that could be traced to infection in the operation theatre.

Four nurses helping every surgeon might appear a costly model. But the system worked. To minimize salary expenses, Dr. V recruited village girls who had completed only high school, instead of nursing diploma holders, as nurses. Before getting inducted into the hospital as nurses, the girls went through rigorous process of selection, training, and classification²⁸. Aravind's nurses were in high demand as trainers. They often visited different countries such as Egypt, Indonesia, Cambodia, Maldives and Malawi to train nursing personnel.

Doctors used bamboo sticks (from bamboos grown in Dr. V's garden) in stretchers instead of steel rods to minimize costs. To further reduce costs, Dr. V set up Aurolab for the manufacture of intra-ocular lenses. In the 1980s, using IOLs was a popular practice in the US. Lens manufacturers were able to enjoy high margins by selling IOLs at \$300 to \$400 a piece. As they recorded healthy margins, they were willing to donate lenses that did not sell well in the market. But when the US health care financing administration (now the Center for Medicare & Medicaid services) put an administered pricing mechanism into place in the late 1980s, the margins of lens manufacturers went down significantly. Hence they were no longer willing to donate lenses. The new scenario forced Dr. V to think of manufacturing lenses in India.

Dr. V found a trusted ally in David Green²⁹ (Green) who shared his dream of creating Aurolab. Green studied IOL manufacturing operations to understand how companies made the lenses. He also visited suppliers of the manufacturing equipment and technology. As the IOL industry was maturing, companies were ready to share their know-how, and sell manufacturing equipment. But it was financially not viable for a non-profit organization to manufacture IOLs as it involved a high quality manufacturing process, expensive machinery, and well-trained workforce. Green said, "So there was a lot of internal opposition, which was overcome when the money for it finally became

²⁴ Joan Magretta, *What management is*, The free press, 2002, p 113.

²⁵ A running nurse's duty is to bring fresh surgical tools from a sterilization area.

²⁶ B Surender, *The world's most efficient doctor*, Mansworldindia.com.

²⁷ www.mansworldindia.com.

²⁸ The process of organizing positions into categories of work (classes) based on the similarity of duties, authority, and responsibility.

²⁹ David Green is an international consultant for developing sustainable eye care facilities.

available from donors, and we just said OK, here's the money, let's do it."³⁰ A global consortium of voluntary organizations backed Dr. V's venture to mass-produce IOLs with the condition that Aurolab would supply IOLs to the members of the consortium at subsidized prices. Dr. V and Green readily agreed and their efforts finally bore fruit.

Aurolab started its manufacturing operations in 1992. Since then production levels have been growing by 37% per year. By the end of 2003, Aurolab was an ISO 9002 certified institution and exported IOLs to nearly 90 countries in the world. It manufactured 0.6-0.7 million IOLs every year and enjoyed a 10% market share in the world. With its own manufacturing lab, Aravind was able to manufacture IOLs at one-eighth the price of imported lenses.

Aurolab also manufactured ophthalmic suture products. David Green observed that only 10 percent of wound closure products were used in developing countries because they were expensive. Even Aravind used to purchase ophthalmic sutures from an organization that had a near-monopoly in India. Dr. V realized that there was a need for low-cost ophthalmic suture products. Aurolab was the first nonprofit organization to manufacture ophthalmic suture products. It started manufacturing suture products in 1998. These affordable products had FDA approval³¹ in the US and CE Mark Certification³² in Europe. By 2003, Aurolab was selling more than a million ophthalmic suture needles every year.

COMPELLING HUMILITY³³

Dr. V was humble and modest - distinguishing characteristics of Level 5 leaders (the characteristics and operating style of Level 5 leader are given in Exhibit VIII). Commenting on the success of Aravind, Dr. V once said, "Now, people call Aravind a market-driving entity, as opposed to the one being driven by market. We had not known those management strategies. We are transparent, do not exaggerate anything to our patients and are truthful and sympathetic to them. We have nothing more than a helping attitude."³⁴

Like a true Level 5 leader when he could not ascribe his success to someone other than himself, he attributed it to divine or some higher consciousness. "We feel that the higher consciousness is trying gradually to give us a system. We are all aware of the parts of the human body as they work. We take in food; we like the taste of it. Part of it is absorbed here, part of it there. But we are not aware of it. The higher consciousness works in the same way. Slowly, your system is built around it, but not according to human nature. At the hospital, we are slowly building an organization that seems to be linked with the higher consciousness," said Dr. V.³⁵ He further added, "Part of the realization of the bigger purpose comes from the belief that: when we grow in spiritual consciousness, we identify ourselves with all that is in the work and there is no exploitation. It is ourselves we are helping. It is ourselves we are healing."³⁶

³⁰ www.indiatogether.org.

³¹ FDA stands for "US Food & Drug Administration." FDA approval is necessary for companies (selling food and medicine) to market their goods officially in the US.

³² CE Mark signifies compliance with applicable European Community directive (e.g., MDD, IVDD, or AIMDD).

³³ Collins, Jim, *Level 5 Leadership*, Harvard Business Review, Jan 2001, Vol.79, Issue 1.

³⁴ G Sankaranarayanan, *The man and vision behind Aravind Eye Hospital*, Express Health care management, 1-15 Sept 2003.

³⁵ Harriet Rubin, *The perfect vision of Dr. V*, Fast Company, Issue 43, February 2001.

³⁶ Dr Venkataswamy, *Spirituality@work*, Management next, December 2003, Issue-8.

THE HEDGEHOG CONCEPT³⁷

Level 5 leaders identify the area where their companies can be the best in the world. They also identify the areas where they cannot be the best. According to Jim Collins³⁸ an organization that masters “The Hedgehog Concept”³⁹ understands what it is best at in the world, how its economics work best, and what inspires its people continuously. Dr V was very clear as to where Aravind has to operate, and where it could be the best. In a meeting with social entrepreneurs in California, Dr. V once said that he would not employ his business model to distribute hearing aids⁴⁰. He explained that restoring sight was his only priority. Over a period of 26 years he understood how Aravind’s economics work the best. He was also sure what motivated his people.

Young nurses who hailed from villages were deeply committed to Dr V’s ideals and vision. Once an industrialist from Delhi visited Aravind and requested Dr V, “I need to build a hospital, and I’m very much impressed with this one. Could you come to Delhi and start a hospital for me?” Dr V replied, “You have all the money you need. It shouldn’t be hard for you to put up a hospital in Delhi.” “No,” the industrialist said, “I want a hospital with the Aravind culture. People are cordial here... There is a certain amount of inner communion or compassion that flows from them. How do you do it?”⁴¹

Dr. Natchiar⁴² answered his question: “The workers are all farm girls... They come to work at Aravind because they want some human element in their work. They want to work under a different philosophy.”⁴³ Similarly highly skilled surgeons worked at Aravind for meagre salaries (compared to what they could demand in corporate hospitals). Doctors were motivated by the professional satisfaction that they got by doing what they were supposed to do in the best possible way. They relished working in a community that epitomized perfection and compassion. Dr. V also knew that skilled professionals like surgeons seek to stay at the leading edge of the field. Hence, he entered into research and training collaborations with premier teaching hospitals in the United States⁴⁴. Residency students of ophthalmology from Harvard Medical School, John Hopkins, Massachusetts Eye and Ear Infirmary spent some time at Aravind as a part of their education⁴⁵. Working with students and their professors, surgeons at Aravind updated themselves on the latest developments in the field of ophthalmology.

TECHNOLOGY ACCELERATORS⁴⁶

The success of Aravind’s business model depended on numbers. To serve more patients Dr. V educated his customer-patients. In doing so, he took the help of technology. He deployed technology to serve people who were not able come to hospital. In 2003, Aravind was utilizing 30

³⁷ Collins, Jim, *Level 5 Leadership*, Harvard Business Review, Jan 2001, Vol.79, Issue 1.

³⁸ Jim Collins is a leading management thinker and author of books “Built to Last”, and “Good to Great.”

³⁹ Jim Collins, *Good to Great*, Harper Business, 2001 (p118).

⁴⁰ Hearing impairment is a common birth defect. There are 250 million people in developing countries with this physical impairment. The World Health Organization says that nearly half of these people would be able to hear better with a hearing aid. According to an estimate, hearing aid companies produce only 6 million hearing aids per year. And just 12 percent of these are sold in developing countries where 70 percent of the world's population lives. This offers a potential opportunity for organizations that want to use Aravind’s model.

⁴¹ Harriet Rubin, *The perfect vision of Dr. V*, Fast Company, Issue 43, February 2001.

⁴² Natchiar heads the training and skills-enhancement programme of the girls.

⁴³ Harriet Rubin, *The perfect vision of Dr. V*, Fast Company, Issue 43, February 2001.

⁴⁴ Joan Magretta, *What management is*, The free press, 2002 (p114).

⁴⁵ www.mansworldindia.com.

⁴⁶ Vijay Kumar S, *A village where IT is a way of life*, The Hindu, Apr 22, 2002.

Internet kiosks started by n-logue⁴⁷ in remote villages of Tamilnadu. These kiosks were started in thatched huts. Young local women were trained to run these kiosks. In each case, the person operating the kiosks took pictures of patient's eyes using a webcam (Refer to Exhibit IX) and sent them to the doctor along with a filled-in online questionnaire (symptoms of patient were recorded in this questionnaire). The doctor from Aravind hospital received it through e-mail instantaneously and interacted with the patient through an online chat (the person running kiosk acts as a facilitator) and gave him an appointment at hospital the following week, if he felt that physical examination was necessary. Otherwise, he gave his suggestions through e-mail immediately. Without the new technology, the same procedure would take a minimum of ten days, even when facilities such as a photo studio and a postal mail system were available. The new technology reduced both the time and the expenses incurred.

Thus a poor villager could talk to a top class eye surgeon online. Most of the villagers in these villages had never spoken to a doctor in their life. Aravind's telemedicine⁴⁸ was thus a boon to its customers.

The eye surgeons at Aravind too benefited by enhancing their skills through the Internet technologies. Now they could interact and share information with experts in other parts of the world through the Internet. They could even watch live surgeries being conducted in Boston, London or other parts of the world using internet technologies and employ what they learnt in treating their patients.

CONCLUSION

Dr. V was a blend of intense professional will and compelling modesty. In setting up the hospital and driving for economies of scale, he demonstrated strong will. In attributing his success as a founder of Aravind eye care system to some higher consciousness, he epitomized humility.

Like a true Level 5 leader, he attempted to leverage technology to serve his customers better. By sticking to his strength - offering high quality eye care at affordable price, he reminds us of other Level 5 leaders Jim Collins talked about in "Good to Great."

Dr V inspired his people with high standards. His people were driven by an innate drive to seek perfection in whatever they did. Not everybody might fit into a system like this. Aravind's system had a cult-like culture that one sometimes sees in great organizations. By creating a dedicated system, culture and standards, Dr V laid a strong foundation for the future greatness of his organization.

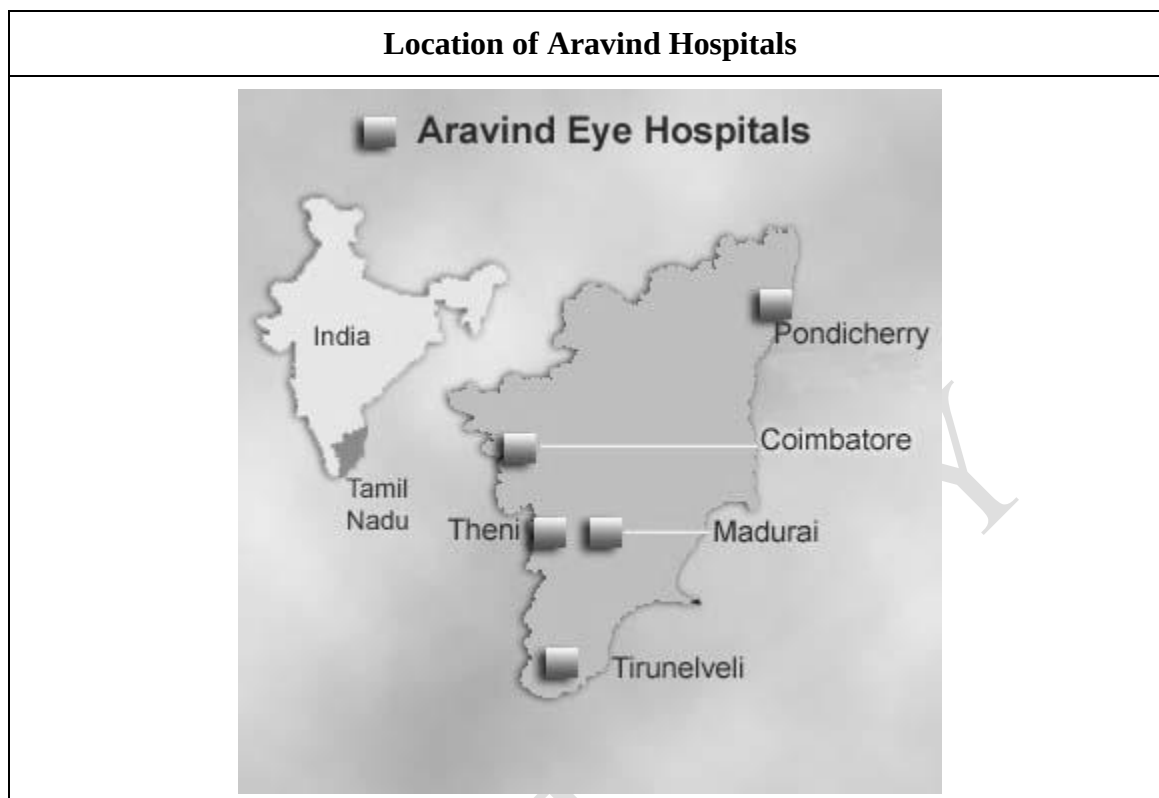
⁴⁷ n-logue is a commercial offshoot of the (TeNet group is a research group started by the professors of IIT. Professors at this group developed CorDECT telecom technology, an innovative access network technology, who also floated the company, Midas Communications. The professors' main aim was to develop a telecom technology that would provide the rural Indians access to telephones. Midas is a technology company which manufactures and markets this technology all over the world and n-Logue is the company which provides telephone and internet services in rural India) Indian Institute of Technology, Madras. The company aspires to start similar facilities in all rural India in the next 10 years.

⁴⁸ The use of interactive audio, video, or other electronic media (excluding telephones or fax machines) to deliver health care. The term includes the use of electronic media for diagnosis, consultation, treatment, transfer of medical data, and medical education.

QUESTIONS FOR DISCUSSION:

1. Do you think Dr V has the characteristics of a level 5 leader? Discuss whether a level 5 leader can be effective in organizations of the future.
2. Do you think Aravind's emphasis on quality, efficiency, cost minimization, customer education, concern for customers, continuous updation of skills of its people, and spiritual orientation to work, make it an organization of the future?
3. Aravind provides eye care, and manufactures IOLs. In both fields it has demonstrated that efficiencies of scale are obtainable. Can Aravind serve as an example to organizations in service and manufacturing industries? Discuss also new circumstances Aravind might face as it starts expanding to other parts of the world.

Exhibit I



Source: <http://www.aravind.org/hospital/index.htm>

Exhibit II

Dr V's Major Research, Clinical and Management Accomplishments
• Demonstrated the link between vitamin A deficiency and childhood blindness. • Developed and pioneered the concept of eye camps and safe assembly-line techniques, which have become models for blindness prevention and treatment programs worldwide. • Personally performed over 100,000 successful eye surgeries.

Source: www.owsp.org

Exhibit III

Awards and Honors Won by Dr V	
•	Lifetime Service Award from the International Agency for the Prevention of Blindness ⁴⁹ based in UK, 1982
•	Honorary Doctorate from University of Illinois, 1985
•	Lions Clubs' Melvin Jones Fellow Award, 1987
•	Harold Wit Lectureship, Harvard Divinity School, 1991
•	Pisart-Lighthouse for the Blind Award, 1992
•	International Blindness Prevention Award, American Academy of Ophthalmology, 1993
•	Susrata Award, Asia Pacific Academy of Ophthalmology, 1997

Source: www.owsp.org

Exhibit IV

Dr V's Contributions at Government Erskine Hospital
Introduced the following for the blind:
• Eye Camp Programme (1960)
• Rehabilitation Center for the Blind (1966)
• Low Vision Aid Clinic (1968)
• Glaucoma Demonstration Center (1968)
• Ophthalmic Assistant Training Program (1973)
• Rural Rehabilitation for the Blind Project (1973)

Source: www.owsp.org

Exhibit V

Aravind's Mission
To eradicate needless blindness by providing appropriate, compassionate and quality eye care for all.

Source: <http://www.aravind.org/about/index.htm>

⁴⁹ The International Agency for the Prevention of Blindness was established in 1975 as a coordinating, umbrella organization to lead an international effort in mobilizing resources for blindness prevention activities.

Exhibit: VI

Aravind Eye Care System: Specialty Centres

Retina & Vitreous: After cataract, retinal disorders caused by diabetes is the second most common cause of blindness in developing countries. The Retina and Vitreous Service Centre was the first speciality clinic started at Aravind Eye Hospital. This centre treats patients with disorders such as retinal detachments, infection and vascular disorders of the retina, trauma, congenital diseases of the retina and macula.

Intraocular lens & Cataract: In 81% of cases of blindness, cataract is the main culprit. At the Centre for Intraocular Lens & Cataract, patients suffering from subluxated cataract, traumatic cataract, complicated cataract, high myopia, coloboma and cataract with corneal pathology are treated.

Neuro-ophthalmology: Infection, trauma, or other diseases can damage the optic nerve that transmits visual impulses to brain. This damage can cause blindness. The Neuro-ophthalmology Centre at Aravind treats patients with neurological diseases such as optic neuritis, diplopia, optic atrophy, temporal pallor, papilledema and ocular motor nerve palsies.

Cornea: Corneal eye disease can lead to complete blindness. The Centre for Cornea treats cases of infectious keratitis every year. The Centre also conducts research on application of new antibiotics to treat bacterial keratitis and genetics of molecular corneal dystrophy. Aravind hospital is conducting research programs in collaboration with the Proctor Foundation of the US. Companies such as Allergan, Alcon, Santen Pharmaceuticals and Vistakon are conducting drug trials for Aravind.

Refractive Surgery Centre: This Centre was started to treat patients with myopia, astigmatism, and hypermetropia. Using LASIK (Laser Insitu Keratomileusis), Aravind's doctors correct the shape of the cornea by correcting refractive errors. LASIK is a high-tech surgical technique. The computer controlled excimer laser ensures accuracy and precision in surgery.

Paediatric Ophthalmology and Strabismus: This Centre is dedicated to the development of special techniques to examine and treat children's eye diseases. Common childhood eye diseases treated at the center are refractive errors, strabismus, amblyopia, congenital cataract, genetic eye diseases and congenital glaucoma.

Contact Lens Centre: This Centre at Aravind fits contact lens for patients suffering from myopia, hypermetropia and astigmatism. Lenses are also therapeutically used in keratoconus (irregular curvature of the cornea) and aphakia.

Glaucoma: According to a survey conducted by Aravind Eye Hospital, 2.5-3.0% of the Indian population above 30 years of age suffers from this disorder. The Centre treats primary glaucomas (which are inherited), and secondary glaucomas which are caused by trauma, inflammation, diabetes, retinal vascular disease and hyper mature cataracts.

Uvea: The eye is ball-shaped and is made of three different layers: Sclera - the outer layer, Retina -the innermost layer, and Uvea - the middle layer. Uvetis is a disease caused by inflammation of the uvea. The Centre examines 30-40 patients every day. Researchers at this center have two landmark achievements. First, they identified for the first time the etiological agent of an epidemic outbreak of an infectious Uvetis named Leptospiral Uvetis. Second, in collaboration with researchers at Dohney Eye Institute based at Los Angeles, they identified paediatric trematode granulomatous uveitis.

Orbit and Oculoplasty: Oculoplasty is a separate sub-speciality center. This Centre studies anomalies and abnormalities of lids, lacrimal system, extra ocular structures, bony orbit and other structures around the eye. The department focuses on evaluation, diagnosis and management of the orbital diseases.

Source: <http://www.aravind.org/hospital/index.htm>

Exhibit VII (A)

Each Day at Aravind Eye Hospitals

Across all five Aravind Eye Hospitals:

- About 4,055 out-patient visits are handled
- About 542 surgeries take place
- About 3 camps are conducted, where about a thousand patients are seen, of which about 300 undergo surgery

Source: <http://www.aravind.org/hospital/index.htm>

Exhibit VII (B)

Statistics

Year: 2003

Outpatient Visits: 1,480,012

Surgeries: 197,877

Free Eye Camps: 1,158

Years: 1978-2003

Outpatient Visits: 16,149,106

Surgeries: 1,799,625

Source: <http://www.aravind.org/hospital/index.htm>

Exhibit VIII

Characteristics of Level 5 Leaders

Level 5 leaders are a paradoxical blend of fierce will and personal humility. They are stubborn and ruthless, yet they are humble. They are highly ambitious for their company, and rarely allow their ego to come in the way of the organization's success. Though they accomplish great things for their organizations they never take the credit. They attribute their remarkable accomplishments to their people, external factors, and sheer luck. They are inspired only by the greatness of their organizations. They expect their organizations to be even better after they leave. To ensure this they choose superb successors. What makes them uncomfortable is unrealized potential and complacency. Level 5 leaders regard leaving potential unrealized as a sin. They are highly intolerant of complacency. For them good is never good enough.

Fierce will

Level 5 leaders demonstrate their fierce will in ensuring superb results for their companies. They play the most important role in transforming their companies that were merely good, to great companies. Once they are decided about what to do to ensure the best long-term results, they will go through the process with unwavering resolve. Level 5 leaders inspire standards, and build enduring and great companies against the odds. For a further understanding of their determination, refer Exhibit 9.1.

Compelling humility

Level 5 leaders are characterized by compelling humility. They shun public attention. They are never boastful. They are always happy to discuss at length about their company and the contribution of their people. But they are generally averse to discussing their role in the success of company. Level 5 leaders are quiet, and show calm determination when a task is to be accomplished. In case of poor results, they do not blame the external environment.

Operating style of level 5 leaders

Level 5 leaders lead with the help of disciplined people, disciplined thought, and disciplined action. They first identify disciplined people. They don't manage them because they don't need to. Through these disciplined or 'right' people, they manage the system. Then they attempt disciplined thought. Discipline is necessary to face hard facts. Also, disciplined people bring in the discipline necessary in the organization for executing ideas. Finally, disciplined action is necessary. This ensures the desired and expected results.

An organization is not always best at its core business, which it may have been engaged in for years, maybe even decades. And if an organization is not the best in the world in its core business then it cannot be a great company. For this reason, Level 5 leaders identify the area where their company can be the best in the world. They also identify the areas where they cannot be the best.

Level 5 leaders also identify suitable economic indicators to measure their performance. They are masters at ensuring continuous and healthy cash flows, and profitability.

Level 5 leaders never give new technology the highest priority in their quest for transforming their companies. They believe that in order to use the technology appropriately, they should first understand how relevant the technology is. They apply the technology only once they understand its relevance, and ensure that it conforms with the organization's Hedgehog concept.

Source: IBS Center for Management Research.

Exhibit IX

A 70-year-old Man in Pathinettangudi, Mailing a Photograph of his Eyes to the Aravind Eye Hospital, Madurai, through Webcam for Consultation.



Source: <http://www.hinduonnet.com/thehindu/2002/04/22/stories/2002042201340500.htm>

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