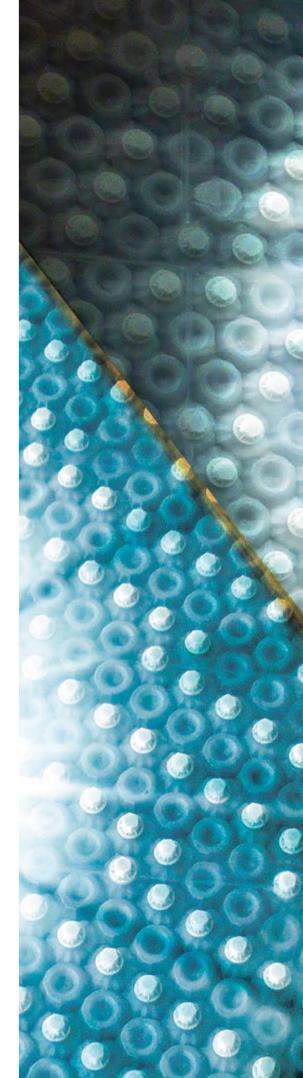
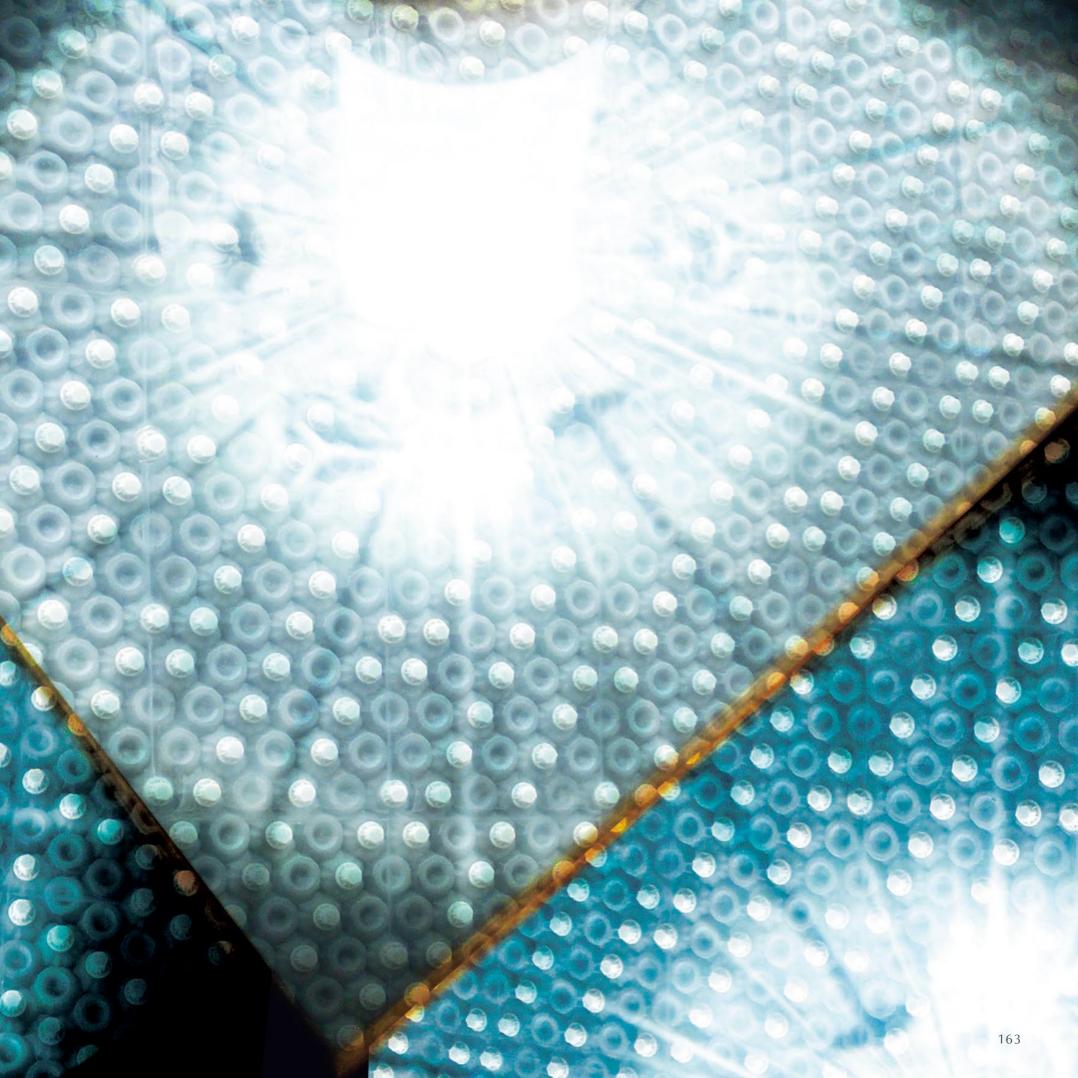
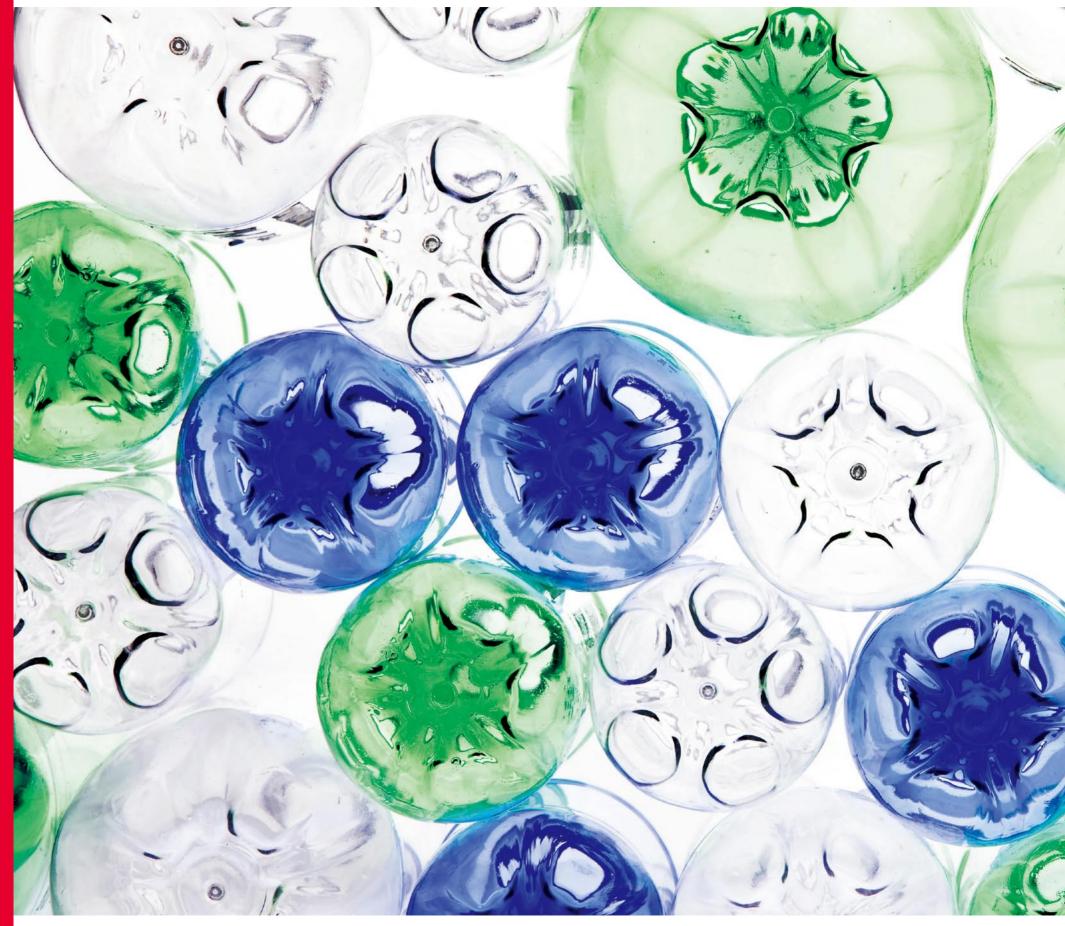
VI. 創新 Innovation

Far Eastern Group (FEG) has through continued innovation maintained corporate competitiveness and vitality. Douglas Tong Hsu, Chairman and CEO, emphasizes the necessity of innovation for corporate evolution. Stressing the integration of a "Blue Ocean" business strategy with cost leadership and product/service differentiation to heighten the client's value as the way towards a more successful business model. In this way, through the creation of a "butterfly effect," where the novelty of a small change in circumstances can trigger a large change in outcome, FEG has contributed greatly to the creation of a stronger future for Taiwan.









Coolerpak™ Beer Bottle

1979, Johnny Shih, Vice President of Far Eastern Textile Ltd. (FETL, renamed Far Eastern New Century Corp.), brought a 2000 ml PET Coca-Cola bottle back to the company for analysis. His hope was to create a smaller version of the bottle to best fit the tastes of the Asian consumer. This idea in a once uncontested market space would eventually have a big influence on consumer spending habits and Taiwan by creating new demand.

Having created the first Coca-Cola PET bottle in Asia 20 years ago, FETL now has 60% of the Taiwan market share for cola bottle production. As PET bottles are low in cost and easily transportable, they are now a common choice for bottling carbonated drinks, tea, and water. Since then FETL has grown to be the largest PET bottle producer in Asia and the third largest worldwide.

For over a decade, Chairman Douglas Tong Hsu of Far Eastern Group, has been researching the possibilities of expanding PET bottle applications. The challenges of expanding bottle applications have been numerous due to issues with carbonation leaks and production costs resulting in an absence of the ubiquitous PET bottle for use in alcoholic beverages. In 2003, Douglas Tong Hsu after some persistence, discovered that Belgian beer company Martens, was using a low-cost nano-layered PET bottle that was suitable for bottling alcohol. In 2007, the two parties collaborated to establish Sino Belgium Beer Suzhou, China to produce the PET beer bottle Coolerpak[™]. This new packaging technology is a big step forward for the beer industry.

Johnny Shih explains that Coolerpak[™] maintains both the advantages of glass and aluminum bottles. While transparent as glass bottles, they are lighter and do not burst. They also offer more convenient sealing with twist tops that can be easily opened and resealed for longer storage. Production methods of Coolerpak[™] bottles are more environment friendly, reducing carbon emissions and air pollution as well. In addition, when the bottles are recycled, the washing process can be eliminated, thereby reducing water consumption with the additional advantage that they can be easily recycled along with other PET bottles.

FETL innovates to promote the LOHAS lifestyle. Coolerpak™ is one outstanding example.

- Left: An array of PET bottles produced by Far Eastern New Century Corp. (formerly Far Eastern Textile Ltd.)
- Right: The Coolerpak[™], a term coined by Far Eastern New Century

oolerpo

oolerpa



Far Eastern R&D Center

ar Eastern Group is moving forward with new innovative practices, particularly in Research and Development. While each business incorporates its own R&D facility for the development of its own needs, Yuan Ze University (YZU) as a leading private Taiwan University established in 1987 with a R&D Center has been an invaluable resource as a think tank for inventive solutions for the Group. Within such a diversified conglomerate, each business has a product and service testing ground, providing rapid value-added feedback about market changes. YZU however provides cutting-edge research and innovative prototypes for industry evaluation making the product development cycle more complete and advanced. Diverse FEG affiliates working together create a continuous feedback loop that provides tremendous Group advantages in potential growth areas.

FEG's R&D is based on particular business needs and follows two models, with its own internal R&D team, and the centralized research of Far Eastern Research and Development Center. At the R&D Center, there are over 140 specialty researchers who work on developments in fiber, polymer, optoelectronics, and biotechnology research. Prioritizing eco-friendly technologies, a recent success is the development of the biodegradable material, FEPOL^{*}, currently used in producing plastic shopping bags, which made a successful debut at city'super supermarket chain in FEG.

Noteworthy successes from individual R&D teams have been for example Oriental Union Chemical Corporation (OUCC) beginning the mass production of ethylene oxide derivatives (EOD) in 2009 and for which their research efforts in the past decade have increasingly reaped benefits. In addition, production of EOD the surfactant in the cotton-spinning process has proven to directly benefit other FEG businesses. Everest Textile's R&D center, for example, has focused its efforts on midstream and downstream business needs such as yarn-spinning, weaving, and dyeing. Its technology is now far superior to that of its competitors. In 2004, Everest established the Advanced Technology Institute to focus its efforts on coating lamination technologies. Its leadership in this area has upgraded the traditional textile industry to a higher-tech level bringing advancements to the field.

Innovation encompasses all 360 degrees and should incorporate the complete processes of R&D, production, finance, marketing, administration and after-sales service. For the best and most profitable outcome, preparation time to market and the clients' needs must be optimized, as any minor or favorable change in circumstances can have a profound impact and far-reaching implications. FEG's innovative R&D departments therefore continue to make improvements, which contribute to society.









Innovation in Cement Bulk Shipping

Taiwan prior to 1980, the cement transportation industry was on land through trucking at a volume of about 1,200 tons a day. Post 1980, Asia Cement Corporation (ACC) created the coastal marine transportation method and raised its shipping volume to 5,000 tons per day. The company's first maritime vessel, Asia Cement No. 1, effectively reduced Taiwan's cost in transporting cement and transformed the business to expand capabilities to ship to ports throughout Asia.



Asia Cement No. 1 Christening

Taiwan is a mountainous island with beautiful coastlines and high population density; land transportation is time-consuming and not cost-effective. Tsai-Hsiung Chang, who was the ACC Hualien plant manager at the time and is now CEO of Asia Cement (China), initiated a new strategy to transform cement transportation from land to marine transportation to extend its reach. First exploring a German collaboration in shipbuilding, he later abandoned it due to the high cost. In the late 1970s, the Taiwan government promoted the shipbuilding industry and Chang immediately investigated the feasibility of building vessels in Taiwan. Understanding shipbuilding's high professional threshold and after confirming ship construction difficulties could be overcome, he hired professional Swedish shipbuilding consultants who after the completion of the structural design would turn it over for construction to Taiwan's China Shipbuilding Corporation. ACC however would lead the new design of the ship's cement-loading equipment in a project that would take just over a year. On completion, Asia Cement No. 1 was christened at 100 meters long, 16.2 meters wide, and 8.1 meters high and embarked on her maiden voyage in 1980. The entire project cost US\$4 million - a much less expensive project cost than the original proposal with the German shipbuilder. This new innovative design was the first self-loading/unloading cement carrier with enclosed containers and an automatic guidance system. The birth of Asia Cement No. 1 gave ACC a huge competitive advantage in efficiency and environmental protection and would be imitated by its main competitor three years later. Marine transportation extended cement transportation from Taiwan's eastern coast of Hualien to cities all around Taiwan, as well as to Hong Kong, Singapore, Hawaii, Nigeria, and the Middle East transforming this industry. Since 2000, ACC has grown to establish cement plants in China along the Yangtze River, the longest and most important river economically in China emptying into the East China Sea at Shanghai, and thus Asia. The future lies in the successful incorporation of the marine transportation model to this industry in China. Marine transport represents a "Blue Ocean" win-win strategy for its customers and ACC in the competitive cross-Straits cement market.

Innovation in Medical Services

here are many reasons why Far Eastern Memorial Hospital (FEMH) was awarded the *National Quality Award* in 2008. In its passion for service, FEMH broke many records with its innovative medical techniques and treatments. "Saving Lives comes first" is the motto of Dr. Shu-Hsun Chu, the hospital's President. Since he joined FEMH in 1999, Dr. Chu has led the continual reinvention of the medical team through focused efforts and innovative technologies in cardiovascular medicine, cancer, critical care, traumatology, transplantation, minimally invasive surgery, nephrology, and other significant areas.

FEMH's successful medical team has saved many patients' lives. On January 18, 2000, FEMH conducted the first open-heart surgery in Taipei County. A year later, FEMH would successfully complete the first "three hearts" heart transplant in the world. The surgery sequentially implanted two donors' hearts to the patient's own partial atrial chambers to create a patient with three hearts.

In April 2001, history at FEMH was made when the second successful heterotopic heart transplant surgery was conducted. This was the first time in Asia a patient underwent a successful heart transplant after the donor's heart had stopped beating. More recent accomplishments include a kidney transplant (2002), a small intestine transplant (2007), radiation therapy using TomoTherapy[®], that minimizes unnecessary radiation exposure (2008), and a liver transplant (2009). Many have marveled at the complexity of these surgeries as the success of the small intestine transplant surgery unfortunately has a very low success rate. While many medical centers are still only testing this procedure on animals, FEMH is already carrying out this surgery successfully on patients.

Laparoscopic surgery or minimally invasive surgery (MIS, "keyhole surgery") conducted at FEMH focuses on making smaller incisions to reduce pain and patient recovery time. After perfecting medical treatments, truly inspirational to the FEMH medical team is Dr. Chu's next goal to minimize wounds and shorten time in surgery and hospital stays.

Currently, heart surgery and hernia surgery doctors use MIS techniques to reduce incision wounds. Surgeons at FEMH use laparoscopic surgery to cure stomach cancer, liver cancer, and pancreatic cancer. "In the future, we will extend this technique by going through natural body openings such as the nostrils and anus," Dr. Chu predicts.

The hospital also stays ahead of the game by utilizing high-tech communications technology to remotely monitor a patient's heart condition. The system sends patient's data instantly to the hospital for analysis and can be done from any part of the world.

Though innovation continues at Far Eastern Memorial Hospital, the first priority will continue to be the saving of lives.





■ Members of the medical team at Far Eastern Memorial Hospital continually reinvent themselves







Innovation in Education

20 years, Yuan Ze University (YZU) has steadily progressed from an institute of technology, to a small comprehensive university, and finally to its current stage as one of Taiwan's most outstanding and reputable private universities with a goal to be a bilingual applicationoriented research university. 18 years ago, YZU as a technology institute realized the necessity of a computerized information system and the administration was early to place computers in every classroom for student use. Forging ahead it pushed the boundaries in electronic documentation, digital signatures, and the use of online official documents, which are taken for granted today.

In 1989, in order to allow students to gain practical experience, YZU promoted the "sandwich" teaching system where students could apply for an internship while still in school. Through on-thejob practical training, students were able to expand their horizons and gain hands-on work experience in addition to continuing on in their academic studies.

In order to cultivate senior management talent, YZU established the first Taiwan Executive MBA program in 1996. In 1999, it established a graduate program in Visual Arts Administration. YZU also established a unique teacher reward program to raise the school's overall teaching standards, which due to the effectiveness of the program has been replicated by many universities.

Unlike other Taiwan universities, YZU provides freshmen transitioning into their sophomore year the opportunity to change majors; the school provides a 10% student transfer quota from each department to allow students to focus on their interests. YZU also concentrates on innovation and collaboration among students and faculty. For example, the Fuel Cell Center (FCC) consists of over 20 professors and researchers from diverse departments including mechanical engineering and chemical engineering. This collaboration of manifold talent pools has made the FCC a leader of fuel cell engineering and technology in Taiwan.

Innovation in Telecom Services

hen Far EasTone Telecommunications Co., Ltd. (FET) officially opened for business in 1998, it stunned Taiwan's telecommunications industry by introducing the prepaid card program. Not only was FET the first company in Taiwan to introduce prepaid cards — this was just the first in a series of FET innovations. The company was the first to introduce ring tones service, multimedia/3G cellular phones, mobile Internet, and e-business services. The firm has contributed to a complete change in cellular phone usage habits. In 2006, FET was recognized for the *Most Innovative Mobile Service Campaign* by *Asian Mobile News Awards*.

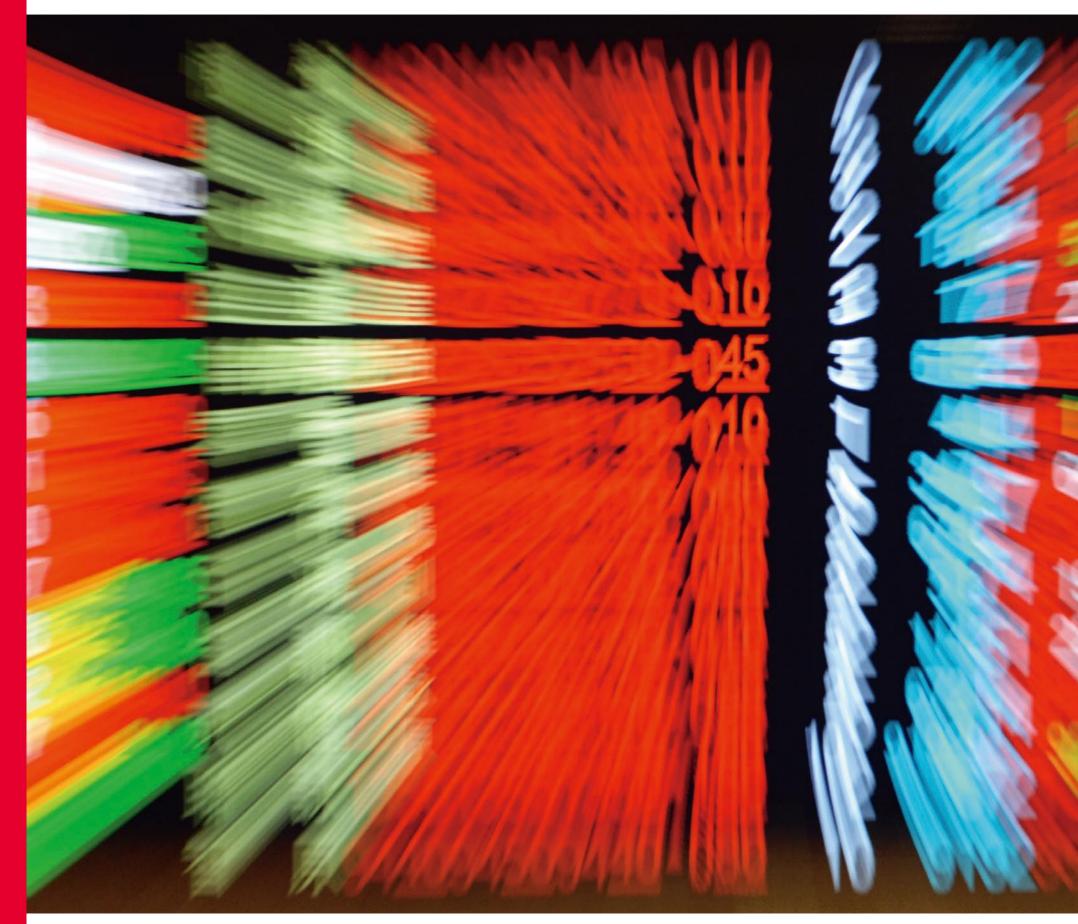
FET's innovation comes from the ability to bundle services and technology to create an attractive package for customers. To take cellular phone insurance as an example, FET collaborates with insurance companies to provide not only insurance coverage, but also furnish customers with nearly new substitute phones while insurance claims are being processed. Such attentive services have won the loyalty of many customers.

FET constantly analyzes the market, customer needs, new trends, and emerging technologies. The company internally encourages staff to share any thread of an idea, views or new concepts promoting innovation. "Our decisions and choices might not always be right. Nor are all innovative ideas successful," says Jan Nilsson, FET Vice Chairman. "As long as employees learn from their mistakes, FET always gives them a second chance." Far EasTone is the brand people think of when they speak of innovation. Its method of constantly reinventing itself has rooted the company deeply in customers' minds.



FARE







Innovation in Financial Management

ar Eastern Group continues to demonstrate financial innovation. In 1990, Far Eastern Textile Ltd. (FETL, since renamed Far Eastern New Century Corp.) was the first company in Taiwan to issue a Convertible Bond - then a new product innovation. In 1991, when FETL issued a US\$50 million Euro-Convertible Bond maturing in 15 years insurance companies and investment firms imme-



 Far Eastern New Century (formerly Far Eastern Textile Ltd.) first press conference on issuing a Euro-CB

diately subscribed to it. In 1992, the company was a Taiwan pioneer in issuing Global Depositary Receipts (GDRs). Subsequently in 1994, it issued corporate bonds and notes with long- and short-term maturities. Then, in 1996, it reached a financial milestone by issuing Exchangeable Bonds domestically to allow the exchange of FETL common shares into that of U-Ming Marine Transport Co., Ltd., an affiliate. In addition, in 1998, FETL was the first Taiwan company to issue a bond that combined both fixed and adjustable rates.

In these 20 years, FEG was able to achieve the goal of raising funds using low-cost methods. Its careful and logical plan with innovative concepts was the key factor in its success. It drove financial innovation in the domestic financial market, explored possible financial avenues, and attracted foreign investors. Champion Lee, FEG's Chief Financial Officer, says in the Group's first 30 years, bank lending was the Group's major source of capital. In the second thirty years, with the internationalization and liberalization of the financial markets, FEG was able to explore more diverse investment channels. The Group's business interests are concentrated in a combination of key domestic manufacturing and service industries. These businesses represent more stable investments than the high-tech industry, which face more dramatic ups and downs. Therefore, investment managers, banks and other financial institutions view FEG as a stable, reliable diversified business conglomerate.

FETL's Financial Department is growing larger acting as the "mother ship" of the Group. The company has been keeping up with other international companies since subscribing to the Bloomberg financial information system and began conducting business with many international and domestic financial companies 20 years ago. When there is a new financial product in the market, the company always explores the possibility of issuing such a product if it meets a company need.

When FETL issued its first CB in 1990, it communicated with the Taiwan Stock Exchange Corporation (TWSE) for over a year to help the TWSE understand the product's concept and details. By issuing several innovative financial products, the company helped the Group reach its potential by diversifying its capital sources with relatively low-cost financial products and reduced risks. Weathering the 2008 economic crisis, FEG's stability helped it gain many partners in the financial industry. These partners willingly seek to provide the Group with low-cost funding at the best rates. Amid internationalization, financial innovation is a key long-term strategy for FEG.

■ FEG's financial innovation is a key long-term strategy

HAPPY GO Card

he HAPPY GO card created by the Far Eastern Group is one of the easiest ways to reward customers for buying Group products and services. FEG's Chairman Douglas Tong Hsu says: "There are many customers who go to Far Eastern International Bank to open bank accounts or our department stores to shop. Making sure that their HAPPY GO rewards are accurately pooled, complete, and accounted for is important." Customers can also use the HAPPY GO card to earn bonus points from purchases made on-line through an integrated Group internet platform. In 2004, FEG established the "One Customer View" to actively consolidate resources of retail businesses in the Group. In 2005, the HAPPY GO joint point collection card was officially presented to the public. It is the only cross-industry reward program in Taiwan. In September 2009, the program surpassed the six million card mark. At the same time, HAPPY GO has established collaboration with over 800 brands and 6,000 stores. With over NT\$150 billion in yearly sales, HAPPY GO customers earn over a hundred million reward points each month.

The success of the HAPPY GO card is simple: the more customers spend, the more rewards they get. "Innovation is based on consumer need and convenience. It must be simple," says Jin-Lin Liang, Chief Operating Officer of Ding Ding Integrated Marketing Services Ltd. Customers can accumulate HAPPY GO points from purchasing basic necessities, regardless of the form of payment. Customers can redeem their rewards at any store affiliated with HAPPY GO. In 2007, HAPPY GO collaborated with the Eden Social Welfare Foundation and World Vision Taiwan to benefit education by using reward points. Even though the concept of the HAPPY GO card is simple, it rejuvenates the consumer market, gives back to society and further enhances education, which in turn has influenced hundreds of thousands of spending habits for the better.





- Above: HAPPY GO Card's volume surpassed five million cards
- Right: HAPPY GO Card Innovative spending platform created by Far Eastern Group







Electronic Toll Collection Service

ar Eastern Electronic Toll Collection Co. (FETC) as its name suggests developed Taiwan's Electronic Toll Collection system (ETC) leading the freeways toll collection system into the electronics era. Responding to the government's call for an intelligent transportation policy, FETC was a collaborative effort among Far EasTone, TECO Electric & Machinery, Syntex Corporation, and MiTAC. In February 2006, ETC officially began operations. In August 2007, the contract was officially signed with the Ministry of Transportation and Communications (MOTC) and the company committed to 18 years of ETC service. Utilizing the radio frequency identification system, all vehicles equipped with ETC devices can travel on Taiwan's highways seamlessly. "ETC is one of the most important innovations in Taiwan's transportation history," FETC President Mike Lee says. "By utilizing the system, a car or truck doesn't need to stop to pay tolls or pay with a prepurchased ticket. The toll-paying process is both instant and reliable." This system can save up to 45 minutes of driving time for those who travel from the north to the south of Taiwan. The system has over 900,000 members, and over four hundred million cars have "beeped" through the ETC lanes since its inception. In addition to convenience, this new system has proven to be better for the environment having saved 17 million liters of gas and reduced 40,000 tons of CO₂ emissions. Paper has been saved as the amount that would have been used for pre-purchased tickets would have stacked as high as 90 Taipei 101 buildings. "Every time a car drives through an ETC lane, it creates NT\$5 of social value," says Mike Lee. Furthermore, the system provides realtime analysis capabilities. Not only can it detect vehicle type and read license plates, but it provides real-time detailed road conditions for the Ministry of Transportation and Communication. FETC is also on call 24/7 providing round-the-clock services to ensure the tolls are always accurately collected.

Looking ahead, FETC hopes to form strategic alliances with car dealerships, retailers, and telecommunications companies to provide ETC equipment, prepaid IC card vending, and other services. ETC is the product of coupling manufacturing, optics, information systems, telecommunications, and even the financial industry. It is a big step towards the goal of "Enabling Travel Convenience." FETC is leading Taiwan travelers into a bright future.



■ Left: ETC System – Providing smooth traveling without stops

■ Right: FETC OBU (On Board Unit)



Taipei Far Eastern Telecom Park

ixty years ago on October 20, 1960, Far Eastern Textile Ltd. (FETL, renamed Far Eastern New Century Corp.) established its base in Banqiao City introducing *Skyscraper* brand undergarments only two months later. At the time, real estate in this rural area cost only NT\$9 for every 3.3 square meters. Only one "GuangFu" Bridge connected Taipei with Banqiao and a rocky road to the textile plant had two permanent tire tracks created by trucks, which were also used by bicycle riding staff to avoid bumps in the road. Such signified the early hardships FETL endured on the road to becoming one of the most influential businesses in Taiwan. In 2005, Far Eastern Group signed a contract with the Ministry of Economics to invest billions in Banqiao City to establish Taipei Far Eastern Telecom Park (Tpark) which will become the new headquarters of Far Eastern Telecommunications' businesses.

Sparq and Far EasTone will provide a world-class telecom infrastructure network in an urban, environment friendly park, while providing an all-important testing platform to spur innovation and product development. With a complete telecommunications cluster system, this campus-like research park will be able to attract many telecommunications companies, cellular phone manufacturers, and upstream, midstream, and downstream vendors to establish offices. Tpark is the most innovative project to date that Far Eastern Group (FEG) has undertaken and is employing the most sustainable, eco-green design methods yet seen in Taiwan. Tpark has a vision to adapt its design to the human spirit, through open space, trees, pedestrian malls, and bikeways. Buildings incorporate design elements from Far Eastern Textile's 60 year-old history with technology elements from the modern telecom sector – mixing the best of the old with the new.

FEG Founder Mr. Yu-Ziang Hsu wouldn't have imagined many years ago it possible that the old dirt roads in Banqiao City could have transformed themselves into the coming nexus of Taiwan's telecom industry with the ability to form global connections to the world. Tpark represents the dream of FEG and the effort of all FEG employees over the past six decades, where from textiles to wireless technology it is poised to be the power of tomorrow's innovation.



■ Above and Right: Artistic rendering of Taipei Telecom Park

