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CSC 546: MANAGEMENT DECISION & CONTROL SYSTEMS SPRING 2007 METTLER TOLEDO INTERNATIONAL INC. PAPER 1: COMPANY PROSPECTUS Due March 2, 2007 Submitted by: SUDEEPTHI MOGALLA DEPARTMENT OF COMPUTERSCIENCENORTH CAROLINA STATE UNIVERISTY Email:[email protected]edu INTRODUCTION Mettler-Toledo International Inc. , headquartered in Greifensee, Switzerland is the world’s largest manufacturer of weighing solutions for laboratory, industrial and retail applications.

With manufacturing facilities in USA, Switzerland, Germany, United Kingdom, and China, and sales & service operations in over 35 countries, it is also a leading global provider of precision instruments and services. It is a market leader in balances and pipettes, and a top provider of automated chemistry systems. It also holds leading market positions in several analytical instruments and process analytics applications. Its industrial product line includes weighing sensors for production and quality, and inspection systems for packaged goods. It also provides weighing solutions for transportation, andfoodretail industries.

It supports its products through a comprehensive global service network assisting customers from calibration to compliance with regulations. It also provides retail software for fresh food management. Mettler-Toledo’s North American headquarters is located in Columbus, Ohio. In 2006, the company generated net sales of $1, 595 million, a 7% annual growth with an operating income of $234 million, a 13% increase from 2005. The company is traded on the New York Stock Exchange under the ticker MTD. Mettler-Toledo International Inc. Page 2 of 23 COMPANY HISTORY The company Mettler Instrumente AG was started in 1945 by Dr.

Erhard Mettler, a Swiss engineer, in Kusnacht, Switzerland. He developed weighing balances that used single pans for laboratory applications. By 1973, the company entered the electronic precision industry by producing the award winning electronic precision balance, the PT1200. With innovations applying microprocessortechnology, new products like automated titrators, and thermal analyzers were added to the laboratory product lines. In 1980, the company was bought by Ciba-Geigy AG, which entered the retail scale market and produced weighing solutions to manufacturing companies.

The company increased its sales and service network to various global locations. Toledo Scale Corporation founded in 1901 and headquartered in Columbus, Ohio was the largest scale manufacturer in US for industrial and retail markets. In 1989, it was acquired by Mettler to form Mettler-Toledo International Inc. In 1997, the company went public and started trading on the New York Stock Exchange. Over the years, the company undertook some major acquisitions thus adding some major brands to the Mettler-Toledo group of companies. Mettler-Toledo International Inc. Page 3 of 23

GROWTH BY ACQUISITIONS Mettler-Toledo started its Product Inspection Division by acquiring HI-SPEED Checkweigher Systems, a custom designer and manufacturer of checkweigher and product handling equipment in Ithaca, NY in 1981. In 1987, GARVENS based in Europe was purchased for its capabilities to produce checkweighing solutions for moving products. The Product Inspection Division was completed by the acquisition of SAFELINE, a leading metal detection manufacturer with facilities in UK and Tampa, Florida in 1997. The Process Analytics Division is started by the acquisition of INGOLD in 1986.

INGOLD provides pH and conductivity solutions for process measurements in chemical processes and sterile applications. THORNTON, a provider of industrial water monitoring based in Bedford, Massachusetts was added to the group in 2000. Some of the markets leaders that operate under their own brands are BERGER Instruments that uses high performance technology to analyze and purify chemical compounds for drug discovery, CARGOSCAN that provides cargo space optimization solutions, LASENTEC that provides solutions for in-process particle size and population analysis and is part f the Automated Chemistry Division, and the California based manufacturer of pipetting solutions, RAININ Instruments. RAININ Mettler-Toledo International Inc. Page 4 of 23 holds a broad range of patents in the pipetting technologies and serves pharmaceutical, biotech, and research applications. Most recently, Mettler-Toledo acquired SOFTECHNICS INC. a provider of software solutions for food retailing applications in 2002. MANAGEMENT TEAM The management team at Mettler-Toledo is led by the President & CEO, Robert F.

Spoerry who is also the Chairman of Board of Directors. Mr. Spoerry has served in the positions of Head of Industrial & Retail divisions for Mettler-Toledo in the past. He is supported by the CFO, William P. Donnelly who was the Head of Product Inspection, the CIO, Jean-Lucien Gloor, and the Head of Human Resources, Peter Burker. Table 1 lists the management team. Table 1: Mettler-Toledo Management Team Name Robert F. Spoerry Current Position President, Chief Executive Officer, and Chairman of Board of Directors William P.

Donnelly Jean-Lucien Gloor Peter Burker Olivier A. Filliol Chief Financial Officer Chief Information Officer Head of Human Resources Head of Global Sales, Service & Marketing, and Head of Process Analytics Mettler-Toledo International Inc. Page 5 of 23 Ken Peters Karl M. Lang Beat E. Luthi Urs Widmer Joakim Weidemanis Hans-Peter von Arb General Manager - North America Marketing General Manager - Asia/Pacific Marketing Head of Laboratory Division Head of Industrial Division Head of Product Inspection Division Head of Retail Division

CORE COMPETENCIES Mettler-Toledo was able to maintain its marketleadershipin numerous product lines primarily due to its ability to constantly develop new products and embrace new technologies. It has gained a reputation as a global innovator by successfully launching new products in various product lines each year. Research & Development has been its core competency from the beginning, and the company has increased its investment in R&D each year over the last few years. In 2005, its R&D spending was over $80 million, which is 5. 5% of its net sales.

Mettler-Toledo holds more than 1700 patents and trademarks in USA, Switzerland, Germany, UK, France, Japan, and China. They developed strong knowledge base in automation, robotics, laser & optical applications, and industrial software development. Over the years, R&D at Mettler-Toledo has contributed through application of advanced technologies, feature-based enhancements on its products, increasing their products Mettler-Toledo International Inc. Page 6 of 23 reliability & accuracy, and developing new software capabilities for its products.

With an R&D force of about 800 employees, the company was able to focus on multiple development efforts simultaneously. As more and more products from the company started including advancements in user-interface through touch screen and LCD technologies, a significant R&D effort went into developing its products’ user-interfaces, the supporting software, and information systems for data management. The significance of software development as a key R&D effort can be understood from the fact that almost half of Mettler-Toledo’s R&D personnel are software engineers.

Beyond R&D efforts, Mettler-Toledo has also made deep inroads in managing its cost structure. The company has developed a strong base of cost reduction functions through its Global Supply Chain Group, which includes the Global Procurement, Global Electronics, and Global Logistics teams. These teams work closely with all the manufacturing facilities and marketing teams on regional and global initiatives to reduce manufacturing costs, internal process costs, total cost of procurement, and logistics costs.

They also work with the Information Technology groups to implement new automation tools that enhance internal process efficiencies, and provide effective data analysis solutions. Key initiatives like supplier category management, corporate procurement card, and field Mettler-Toledo International Inc. Page 7 of 23 employee automation have enabled Mettler-Toledo to reduce their operating costs significantly. Members from Marketing, Purchasing, and Logistics work closely with R&D and Engineering in product development & re-engineering to ensure that efforts are being made to reduce manufacturing costs.

Another aspect of Mettler-Toledo that makes it unique and reduces its risk is its ability to operate profitably in diverse markets. They have developed innovative products in most of the markets they serve and have maintained a strong cross-segment knowledge-sharing that enabled them to use a technology in different segments. Key business functions likeFinance, Supply Chain, Service, Human Resources, and Legal are centralized. They assist the decentralized business units to coordinate their R&D, marketing, and customer support functions in product development and customer service.

PRODUCTS & SERVICES The products and services of Mettler-Toledo can be broadly categorized into Laboratory Instruments, Industrial Instruments and Retail Solutions. Process Analytics and Product Inspection are sub-categories within Lab and Industrial groups. The make up of its 2005 net sales between these business segments is shown in Figure 1. Mettler-Toledo International Inc. Page 8 of 23 Figure 1: 2005 Sales ($ in millions) Retail Solutions, $193, 13% Laboratory Instruments, $667, 45% Industrial Instruments, $622, 42%

Laboratory Instruments Laboratory balances are the primary product group in this business segment and are used in research & development, drug discovery, and process quality control. They are capable of weighing from one ten-millionth of a gram to 32 kilograms. Other products offered in this segment include pipettes, analytical instruments, and automated chemistry solutions. Titrators, thermal analysis systems, and pH meters form the analytical instrument group. The data capture, analysis and management are facilitated by their Lab Software known as LabX.

Within this segment, Process Analytics forms a major subgroup of products that are used in pharmaceutical, biotech, beverage, microelectronics and chemical applications. They offer Mettler-Toledo International Inc. Page 9 of 23 sensor technology for pH, dissolved oxygen, carbon dioxide, conductivity and turbidity. They also include calibration and cleaning systems. Industrial Instruments This segment primarily includes industrial scales and balances for varying weighing needs and ranges. They are used in measuring, counting, ingredient mixing, and mail sorting applications.

Products in this segment also offer in-process and in-motion measurement, dimensioning and identification technologies. Weighing scales for trucks and railcars form the heavy equipment products. All these products are supported by proprietary software like FreeWeigh. Net for statistical quality control, and Formweigh. net for formulation & batching. Product Inspection is a key product group in this segment that the company has invested increasingly in the past few years. The products are used in food processing & packaging, pharmaceutical, and manufacturing industries.

They are made up of metal detection systems, X-ray visioning equipment, and checkweigher systems. Retail Solutions Retail segment is the smallest of Mettler-Toledo businesses in terms of sales. These are scales used in supermarkets, and Mettler-Toledo International Inc. Page 10 of 23 food retail businesses for weighing and labelling applications. With Mettler-Toledo entering the various emerging markets like India, this business segment is expected to grow significantly. Mettler-Toledo also provides software solutions for its retail products through its Softechnics division.

The software provides capabilities for retail inventory management for fresh foods, and integrated data management. The various products offered by Mettler-Toledo are listed in Table 2. Table 2: Products & Service Offerings Product Categories Laboratory Weighing Products & Solutions Micro and ultra-micro balances, analytical balances, precision & high-capacity precision balances, mass comparators, weighing modules, halogen moisture analyzer, pipette calibration workstation, and support software.

Analytical Instruments Thermal values, thermal analysis, titrators, pH-/cond-/ISE-meters, density meters, refractometers, and electrodes for laboratory and field. Pipettes & Tips Single channel pipettes (manual & electronic), multi channel pipettes, tips for Mettler-Toledo International Inc. Page 11 of 23 LTS & traditional pipettes – bio clean, positive displacement pipettes & tips, and repetitive pipettes. Automated Chemistry Solutions Lab automation, chemical synthesis, chromatography, particle system characterization, reaction calorimeters, automated lab reactors, and informatics & workflow management.

Process Analytics Transmitters & Meters, pH & Redox sensors, dissolved oxygen sensors, total organic carbon instruments, conductivity/resistivity sensors, dissolved ozone sensors, dissolved carbon dioxide sensors, flow sensors, and cleaning & calibration systems. Industrial Weighing Automotive refinish scales, material transfer controllers, bench, compact and counting scales, overhead/monorail scales, postal solutions, weigh modules & load cells, software, statistical process control, , and weighing terminals. Product Inspection Transportation & Logistics Checkweighing, metal detection, and X-ray.

Air cargo scales, dimensioners, forklift scales, post/mail solutions, rail scales, and Mettler-Toledo International Inc. Page 12 of 23 weighbridges & truck scales. Food Retail Scales (basic, retail counter, self service, retail hanging, checking & receiving), wrapping machines, auto labelling & security tags, and retail software. CUSTOMERS The customer base of Mettler-Toledo is spread across numerous industries like chemical, pharmaceutical, biotechnology, food & beverage, raw materials, pulp & paper, jewellery, transportation & logistics, OEM, machinery & automotive, and retail.

Most customers are serviced through their three business segment groups, Lab, Industrial and Retail. Certain key accounts with which the company has developed strategic relationships over the years are serviced and supported by their Strategic Accounts group. The customer base of Mettler-Toledo is also highly diversified with sales from each of their top customers accounting for less than 3% of total net sales. MANUFACTURING Mettler-Toledo’s manufacturing facilities known as Producing Organizations (POs) are located primarily in USA, UK, Switzerland, Germany, and China.

Each PO dedicates its product Mettler-Toledo International Inc. Page 13 of 23 development and manufacturing efforts to a certain group of product lines and serves the global needs of those products. This enables Mettler-Toledo to reduce R&D costs, maintain a customer focus, and to develop product leadership by a PO in its line of business. The POs work with each other in their product development, manufacturing, and procurement efforts, and with the marketing groups in understanding customer needs.

Safeline, Garvens, and Hi-Speed, which serve the Product Inspection markets, work very closely in coordinating their efforts. Depending on the manufacturing capability and capacity constraints, certain POs act as internal suppliers to other POs who may use their manufacturing resources. MARKETING, SALES & SERVICE Unlike the Producing Organizations, the Marketing Organizations (MOs) at Mettler-Toledo are segmented based on their geographic focus. The MOs are located all over the world, with the largest groups in USA and Europe.

This enables them to understand the specific local needs of the customers, and develop close relationships with their entire customer base. The sales and service efforts parallel that of the marketing thus maintaining a close loop for the customer relationship. MettlerToledo maintains a large employee base of 5000 employees that is Mettler-Toledo International Inc. Page 14 of 23 spread over 35 countries in the form of marketing, service technicians and customer service professionals.

Mettler-Toledo also offers numerous services in the form of repair & service maintenance, and value-added services for regulatory compliance. These are offered across the globe based on local regulations. Their global service network has expanded over the years as they explore numerous emerging markets. In 2005, revenues from service agreements, repair, and spare parts constituted 23% of the company’s net sales. INFORMATION TECHNOLOGY & MIS The company’s IT operations are lead by their corporate team in Switzerland, which maintains the globally used operating systems, providing regular updates and support.

Their global contracts with key hardware and software vendors ensure product standardization and concurrent upgrades. They have however decentralized most of the locally operated systems, like their MRP and ERP solutions at the manufacturing facilities and marketing organizations. Being a highly decentralized organization, except for some global software systems, most IT infrastructure is maintained regionally. The regional IT groups also handle the telecommunications, mobile phone, and data networks for their region.

The company has continuously made significant investments to standardize the IT operations where Mettler-Toledo International Inc. Page 15 of 23 necessary, and provided the flexibility to local units when higher efficiencies could be gained through local optimization. The company uses ERP packages from well known providers like Baan and Oracle, and also from smaller companies like Fourth Shift, and MAPICS. The company uses numerous enterprise software for various sales and service operations, as well as hosted solutions for e-procurement and e-commerce applications.

EMPLOYEES &CULTUREMettler-Toledo follows a highly decentralized organization structure providing high levels of autonomy to the business units, encouraging entrepreneurialresponsibilityandaccountabilityfor growth and success. The product development and manufacturing activities are performed by the producing organizations, where the marketing, sales and support functions are the responsibility of the marketing organizations. All POs and MOs are supported by corporate global functions.

Mettler-Toledo employs more than 9000 fulltime employees across the globe with more than 4000 in Europe, over 3000 in the Americas, and about 1000 in Asia. About 50% of the workforce is part of their global sales and support network. R&D with over 800 employees is also a key function in the company. The company provides various employee benefits including a pension & post-retirement savings plan that cost them $1. 5 Mettler-Toledo International Inc. Page 16 of 23 million in 2005.

Theirhealthcare benefits cost over $10 million each year. Employee Purchase Programs through corporate agreements are provided for products like personal computers, office supplies, consumer technology, mobile services, and home mortgage. Mettler-Toledo is an equal opportunity company and hires employees from diverse cultural backgrounds and geographic locations. Due to their line of business, they mostly hire engineering graduates from well known institutions in Switzerland, USA, and China.

Most of their senior management has a strong analytical background with engineering, mathematics, or finance focus and many middle management and senior management employees hold advanced degrees in engineering or business. In USA, they recruit new graduates into their InitialCareerExperience program (ICE) which is a rotational program for undergraduate degree holders. They also provideinternshipopportunities in IT, marketing, and supply chain management, and offer fulltime opportunities upon theirgraduation.

Mettler-Toledo maintains a core set of cultural values it expects its employees to follow in their day to day operations. It includes maintaining a strong focus on quality in both its products & services, and its internal processes. It stresses the importance of being aggressive in exploring new markets, and embracing new technologies. There is also a strong need to be Mettler-Toledo International Inc. Page 17 of 23 cost-conscious so that it can maintain its competitiveness against larger players and unsuitable market forces. It expects employees to show initiative and leadership qualities.

Employees should also be innovative and be ready to face the hurdles in executing their ideas. With a global market in place, the company should be agile allowing it to quickly react to changes. A semi-formal workenvironmentis maintained to develop closer employee relationships. The company restricts itself in the use of titles to its management and in fact doesn’t use “ Vice President” as a title. Except for division heads, who are either known as a Head of division or General Manager, all the others are known as Managers, Engineers, or Analysts.

A business casual dress code is maintained at all of its locations. COMPETITIVE LANDSCAPE The markets Mettler-Toledo operates in are highly competitive, and fragmented by location and application. In most markets, they face stiff competition from companies that are focussed and specialized in their offerings. In many cases, the focussed competitors are smaller divisions of very large multinational companies with extensive resources. These factors further signify the necessity for Mettler-Toledo to develop efficient R&D and manufacturing processes to maintain its cost structure.

Mettler-Toledo International Inc. Page 18 of 23 The major competitors of Mettler-Toledo are Beckman Coulter Inc. with $2. 5 billion in annual revenues, Siemens AG with $117 billion in annual revenues, and finally Thermo Fisher Scientific Inc. with $3. 8 billion in annual revenues. Among these Siemens AG operate in many other markets and businesses that MettlerToledo does not involve in. Due to its cost structure advantage, Mettler-Toledo was able to maintain operating margins of over 13%, when their competitors have recorded them at below 10%.

RISK FACTORS Mettler-Toledo notes that since it operates in numerous countries, its operating income can be affected by currency fluctuations. Its international operations also face risks in the form of trade barriers, employee retention in growing markets, lack of protection for its intellectual property, nationalization, and economic and political stability in some countries. Some of the markets are highly competitive and hence may be difficult to continuously maintain market leadership in multiple product lines.

As Mettler-Toledo grows via acquisitions, it has the risk of assimilation challenges, lack of focus on key initiatives, and loss of key employees. As Mettler-Toledo operate in many markets subject to regulations, they have the risk of not meeting some of the regulations in time. Exposure to additional income taxes and unanticipated tax Mettler-Toledo International Inc. Page 19 of 23 laws are also some of the perceived risks faced by MettlerToledo. FINANCIAL PERFORMANCE Mettler-Toledo International Inc. has been delivering strong financial results over the years.

It generated net sales of $1, 596 million in 2006, a 7. 6% increase from its 2005 sales revenue of $1, 482 million. Figure 2 shows 2006 sales by geographic region. Figure 2: 2006 Sales ($ in millions) by region Asia & Rest of the World, $287, 18% Europe, $670, 42% North & South Americas, $638, 40% The chart in Figure 3 shows Mettler-Toledo’s financial performance since 2001. It shows that net sales have increased at an average of 7% year over year. The operating cash flow increased to $192 million in 2006, an 8. 5% increase from $177 Mettler-Toledo International Inc. Page 20 of 23 million in 2005.

The adjusted operating income (gross profit less R&D and SG&A expenses) increased by 13% to $234 million in 2006 from $207 million in 2005. Figure 3: Financial Data (2001-2006) Net Sales $1, 800 Operating Cash Flow Adjusted Operating Income $1, 595 $1, 600 $1, 482 $1, 404 $1, 304 $1, 214 $1, 148 $1, 400 $ in millions $1, 200 $1, 000 $800 $600 $165 $179 $167 $102 $115 $165 $200 $0 2001 2002 2003 Years $117 2004 $166 2005 $177 2006 The company reported Earnings per Share (EPS) of $3. 86 for 2006, which is a 29% growth from $2. 52 in 2005. Through these results the company has demonstrated a strong balance sheet and a substantial cash flow generation.

POSITIONING FOR 2007 AND BEYOND The company exceeded expectations in 2006 with strong financial results, and is expected to perform well in 2007 and beyond. With rising cost pressures due to price increases for oil, steel, paper & pulp, and other raw materials, the company Mettler-Toledo International Inc. Page 21 of 23 $192 $400 $207 $234 needs to continue to improve its cost structure through efficient and effective processes. Some of the key customercentric marketing initiatives undertaken by the company like “ Spinnaker” have been successful in generating new customer leads and improving existing customer relationships.

Its new product launches have been successful in 2006, and the company continues to develop new products in many of its business segments. In 2006, the company was very successful in increasing its market share in emerging markets like Russia and India. With the acquisition of distribution channels in these countries, its market share is expected to grow at significant rates in 2007 and beyond. The analysts estimate that revenues for Mettler-Toledo would grow to $1. 69 billion in 2007 and to $1. 78 billion for 2008. It represents an annual increase of 6. 3% for 2007 and 5. 3% for 2008.

In the short term, the company aims to consolidate all its existing market positions in the various product lines it now holds the top positions, especially industrial and laboratory instruments. It aims to increase its market share in retail weighing market by focusing on emerging markets, which offer the greatest potential for untapped markets. In the long-term, the company will look to be the industry leader in all product segments ranging from laboratory Mettler-Toledo International Inc. Page 22 of 23 instruments, industrial instruments, process analytics, product inspection, and chemistry solutions.

It also plans to consolidate its retail market share through partnerships with global retailers. The strong values developed by its employees, its continued investment in developing innovative products, diversified customer base, and global service network should ensure that Mettler-Toledo is in a strong position to fulfil both its short-term and long-term objectives. REFERENCES 1. Mettler-Toledo website (http://us. mt. com) 2. Yahoo Finance (http://finance. yahoo. com) 3. Hoovers (www. hoovers. com) 4. The Wall Street Journal Online (http://online. wsj. com) Mettler-Toledo International Inc. Page 23 of 23