# 2012

# Corporate Portfolio







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#### About saJWare

saJWare is a Multan, Pakistan based agriculture, technology, trading, and manufacturing firm founded in 2004 by Sajjad Mustehsan. Over the years, the firm has diversified its business portfolio by entering the agriculture machinery distribution, real estate, and dairy industries. Amongst other achievements, it has grown to become the country's biggest dairy machinery distributor. saJWare intends to continue diversifying and expanding its operations. To this effect, it has recently established a state-of-the-art woven polypropylene sack manufacturing unit in Multan and is supporting a software venture in California's Silicon Valley.

#### **Mission Statement**

saJWare's existence and growth are motivated by its desire to enrich the masses by developing state of the art commercial systems that positively impact life while meeting market demands in an efficient and ethical manner. Quality products and services delivered cost effectively serve as the cornerstone of our mission. Our most valuable assets are our employees who share our passion to serve our clients without compromising on the very values that make us who we are.

saJWare embraces diversity and encourages people to be themselves while promoting respect, dignity, and honor in all of our interactions. We understand that a satisfied customer is our biggest dividend that can only be earned by a committed team that is capable of delivering on today's challenges. We lay great emphasis on providing a safe and environmentally friendly work environment in which our team can thrive.

saJWare truly believes in winning the trust of all its stakeholders - our clients, employees, shareholders, and everyone else who is touched by our work - in order to sustain its growth and financial strength.

# Leadership

saJWare is jointly led by the company's two directors namely, Husain Mustehsan and his son, Sajjad Mustehsan. Their biographies are provided below.

#### **Husain Mustehsan**

Husain is saJWare's founding investor & chairman. He holds dual bachelor's degrees in War Studies and Political Sciences obtained at the University of Baluchistan, Quetta and the Pakistan Military Academy respectively. He is a graduate of the Quetta based Command & Staff College. He has also received professional cotton production training at the Alabama A&M University.



In the past, Mustehsan has served as a managing partner of the nationally acclaimed Mustehsan Farms which, under his 25 years of supervision, grew to become a 600 acre multi-business, high yielding economic engine of the southern Punjab region. He has also co-founded Ahsan Agro agencies, an agriculture supplies retailer based in Lodhran, Pakistan as well as the Best Cows Co., a dairy venture now merged with saJWare.

Husain has served as an honorary member of the tax committee at the Cantonment Board Multan and has a distinguished military service record spanning 17 years during which he rendered various prestigious command and staff duties including instructional duties at the School of Infantry and Tactics, Quetta and as the principal staff officer to the Adjutant General. In addition to being a 1971 Indo-Pak war veteran, Mustehsan has also received certificates honoring his innovative efforts towards developing affordable infantry technology.

He has received a range of honors and awards from national as well as multinational organizations based on his achievements in the dairy, agriculture, and trading sectors. In addition to being mentioned in the local and national television, print, and radio media, Mustehsan also has the honor of hosting and attending a diverse set of national and international industrial events. He has contributed to several products and services. He is a member of the Farmer's Association of Pakistan and the Multan Chamber of Commerce.

#### Sajjad Mustehsan

Sajjad is saJWare's founder and CEO. He holds a master's degree in Software Engineering obtained at the Carnegie Mellon University and a bachelor's degree in Information & Computer Science with a specialization in Software Systems obtained at the University of California, Irvine.



In addition, Sajjad is also the founder and CEO of a Silicon Valley based software venture that is backed by saJWare and is involved in the development and delivery of next generation Supply Chain software and services.

In the past, he has served as a geographical information system (GIS) Technical Analyst for one of the world's leading GIS companies, Esri Inc. During his three year tenure at the company's Federal-Civilian services team based in Washington D.C., Sajjad led GIS software engineering projects for major clients including Johnson & Johnson, Lowe's, Balboa Insurance, Census Bureau, U.S. Department of the Interior, Library of Congress, Smithsonian, FCC, Alexion Pharmaceuticals, Acxiom, U.S. Postal Service, FAA, GSA, and the U.S. Department of Agriculture.

Prior to joining Esri, Sajjad served as a Senior Implementation Consultant at Omniture Inc.'s Virginia offices where he led data analytics projects for Fortune 500 clients including Verizon, AT&T, Target, Cisco, Marriot, News Corp, and Freddie Mac. Prior to this, he assisted research efforts at Carnegie Mellon's eSupply Chain Management lab and the Software Engineering Institute in addition to similar efforts at the University of California, Irvine's Institute for Software Research and Flight Dynamics & Control lab. He has also served as a computer science lecturer at the Bahauddin Zakariya University.

Sajjad's graduate work included the development of a distributed software system, intended to streamline the data collection & analysis process associated with the Software Engineering Institute's Service Oriented Migration and Reuse Technique. His past projects also include the Automatic Tracking Controller project, a major component of a surveillance system built by the Raytheon Company for the U.S. Department of Homeland Security.

He has served as an IT consultant for medium sized enterprises such as Phones4Less Inc. of Los Angeles, CA. He is a member of the IEEE and the Multan Chamber of Commerce.

#### **Management**

saJWare is managed by experienced professionals from their respective fields. Provided below are brief biographies of some of the company's key management personnel.

#### **Mushtaq Naqvi**

Mushtaq has been supporting saJWare as its General Manager (Finance) since its incorporation in 2004. He works closely with the company's executives on issues relating to financial management and ensures compliance with financial regulations at all times. He has over 30 years of professional accounting and auditing experience that has been gained during his tenures at some of the country's leading business groups and chartered accountancy firms.



#### **Abdul Rafi**

Rafi has been serving saJWare as its Manager (Corporate) since 2007. In addition to assisting executives with the company's operations, he manages business affairs at saJWare's Farm Equipment division. Earlier in his career, he has served the Pakistan Army for over 32 years during which he has had the opportunity of directly serving senior military leaders at the General Headquarters in Rawalpindi. He has also served as a General Manager at a major security firm.



#### **Muhammad Sarwar**

Sarwar has been supporting saJWare's leadership even before the company was founded. He possesses strong management and planning skills which he has acquired while working in the construction and real estate industry. Sarwar exhibits a high level of business acumen and has the capacity to take up new challenges. He currently heads the lower-medium denier product sales at saJWare Synthetix and also oversees the company's real estate division.



#### **Jodat Kamran Khan**

Jodat joined saJWare as an Accounting Specialist for the Synthetix project in 2010. Prior to joining saJWare, he served as a senior accountant for 12 years at the Meher Dastgir Group of Industries, a leading business group operating in the textile and leather industries. He has also served as an accountant at several local firms involved in the real estate, logistics, and insurance sectors. Jodat holds a bachelor degree obtained at the Bahauddin Zakariya University, Multan.



#### **Usman Durrani**

Usman serves as a Manager (Plant Administration) at saJWare Synthetix. Although he has been supporting the company since 2009, he formally joined in 2011. He is well versed with saJWare's processes in the areas of Supply Chain, Human Resource, Customer Service, Finance, and Security. He plays an instrumental role in reporting insights and implementing executive directions at the Synthetix Plant. Prior to saJWare, he obtained several years of valuable experience in IT management.



#### **Divisions**

Being a diverse, emerging business group, saJWare comprises of five business divisions; each of which is aligned to cater a specific business area. They are described in detail below.

#### **Synthetix**

The Synthetix division is the latest addition to saJWare. It represents months of dedicated effort by the company's leaders and managers towards identifying an opportunity that truly caters the growing needs of sectors experiencing growth. The company understands that areas such as fertilizer, sugar, agriculture, and certain textile sectors are growing rapidly and therefore require polypropylene packaging materials of the highest quality, at the most economical prices, and in unprecedented quantities. This division strives to fulfill this unmet demand.



Photograph shows an internal overview of the saJWare Synthetix facility

#### **Products**

saJWare Synthetix is equipped to produce the following products:

#### • Flat Tape Yarn

The Synthetix plant is capable of producing flat tape yarns with deniers between 380 and 1,500. Tapes as narrow as 1.8 mm can be produced. Our staff is capable of meeting a wide range of tensile strength requirements based on the client's desired performance and economic considerations. Yarns can be UV treated. saJWare can utilize a range of locally available as well as imported dyes to meet customer requirements. Our flat tape yarns are suitable for various applications in industries such as textile, packaging, and construction.

Denier	380 to 1,500
Minimum Width	1.8 mm
Tensile Strength	Per customer requirements
Colors	Diverse palette available
Installed Capacity	Up to 72,000 KM/day



Photograph shows the first few test bobbins produced by the plant in May 2011

#### • Woven Polypropylene Fabric

The unit is equipped to produce woven polypropylene fabric in circular as well as flat forms. Fabric with a range of picks and ends per inch (p.p.i. & e.p.i.) can be produced including the popular 10x10 and 11x11. Fabric can be based on tapes having deniers between 380 and 1,500. A wide range of tensile strength requirements can be met based on the client's desired performance and economic considerations. The fabric's color can be selected from a broad palette based on imported and domestically available dyes. The fabric can be finished in a variety of ways including single or dual sided multi-color printing, hemming, and custom length segments. Typical applications include the packaging and textile industries.

Yarn Denier	380 to 1,500
Width (Flat fabric)	700 mm to 1,700 mm
Width (Tubular fabric)	380 mm to 850 mm
Picks & Ends per inch	10x10 or 11x11 – customization possible
Colors	Diverse palette available
Printing Options	Single or dual sided up to four colors
Other Options	Hemming and custom length segments
Installed Capacity	Up to 42,000 meters/day



Photograph shows circular woven polypropylene fabric being produced at one of the high speed looms

#### • Flat Tape Woven Polypropylene Bags

saJWare Synthetix can manufacture woven polypropylene bags with widths between 13.8 and 33.4 inches. The bags can be made by weaving yarn ranging from 380 to 1,500 in denier. The composition of this yarn can be adjusted to meet the client's specific requirements in terms of tensile strength, economics, durability (e.g. UV treatment), and visual appearance. One or both sides of the bags can be printed in up to four colors. The bags can be single or double stitched using a variety of threads including cotton based as well as synthetic threads such as Duralene®. Bags can be hemmed and can be delivered pre-inserted with HDPE, LDPE, and LLDPE based liners. Specialty bags such as sand bags can also be produced. Typical deliveries are made in the form of compressed bales containing 1,000 bags.

Yarn Denier	380 to 1,500
Bag Width	380 mm (~13.8 inches) to 850 mm (~33.4 inches)
Bag Length	Per customer's requirements
Picks & Ends per inch	10x10 or 11x11 – customization possible
Colors	Diverse palette available
Printing Options	Single or dual sided up to four colors
Stitching Options	Single or double using cotton or synthetic threads
Other Options	Hemming and enhanced UV resistance
Liners	HDPE and/or LDPE liners can be pre-inserted
Installed Capacity	14 million bags/year (expandable to 25M bags/year)
Packaging	Typically as bales contained 1,000 bags



Photograph shows the first few polypropylene woven bags produced by the facility for a local client in May 2011

#### • Synthetic Mesh Fabric

saJWare can produce flat and tubular polypropylene based mesh fabric for a variety of applications. Flat fabric can be produced in widths between 600 and 1,600 mm and tubular fabric can be produced in widths between 300 and 800 mm. The mesh can be delivered with as many as 512 warp threads and its weft density can be set between 10 and 24 wefts for every 100 mm of the fabric. The mesh fabric can be manufactured by weaving yarn ranging from 380 to 1,500 in denier. The composition of this yarn can be adjusted to meet the client's specific requirements in terms of tensile strength, economics, durability (e.g. UV treatment), and visual appearance. The fabric's color can be selected from a broad palette based on imported and domestically available dyes. The fabric can be finished in a variety of ways including hemming and custom length segments.

Yarn Denier	380 to 1,500
Width (Flat fabric)	600 mm to 1,600 mm
Width (Tubular fabric)	300 mm to 800 mm
Maximum Warp Count	512
Weft Density	10 to 24 wefts in 100 mm on fabric
Colors	Diverse palette available
Other Options	Hemming and custom length segments
Installed Capacity	Up to 6,500 meters/day



Photograph shows tubular mesh fabric being produced at saJWare Synthetix in July 2011

#### • Synthetic Mesh Bags

saJWare can produce mesh bags with widths between 11.8 inches and 31.5 inches. The bags can be made by weaving yarn ranging from 380 to 1,500 in denier. The composition of this yarn can be adjusted to meet the client's specific requirements in terms of tensile strength, economics, durability (e.g. UV treatment), and visual appearance. The bag's mesh can be produced with as many as 512 warp threads and its weft density can be set between 10 and 24 wefts for every 100 mm of the mesh fabric. The bags can be single or double stitched using a variety of threads including cotton based as well as synthetic threads such as Duralene®. Bags can be hemmed. Typical deliveries are made in the form of compressed bales.

Yarn Denier	380 to 1,500
Width	300 mm (~11.8 inches) to 800 mm (~31.5 inches)
Maximum Warp Count	512
Weft Density	10 to 24 wefts in 100 mm on fabric
Colors	Diverse palette available
Other Options	Hemming and custom length segments
Installed Capacity	2.3 million bags per year



Photograph shows leno mesh bags containing onions

#### • Polyethylene Film

saJWare can produce tubular as well as flat film using Low Density Polyethylene (LDPE), Linear Low Density Polyethylene (LLDPE), High Density Polyethylene (HDPE), and any combination thereof. The film can be produced in different colors and its composition can be adjusted to meet the client's specific requirements in terms of tensile strength, economics, durability, and visual appearance. The film can be produced with a single face thickness between 0.008 and 0.10 mm. For flat films, the width can be set between 800 and 1,600 mm. For tubular films, the width can be set between 400 and 800 mm. Typical applications include the fertilizer, foods, electronics, packaging, and textile industries.

Single-face Thickness	0.008 to 0.10 mm
Width (Tubular film)	400 mm (~15.8 inches) to 800 mm (~31.5 inches)
Width (Flat film)	800 mm (~31.5 inches) to 1,600 mm (~63 inches)
Materials	HDPE, LDPE, LLDPE, and combinations thereof
Colors	Diverse palette available
Other Options	Custom length segments
Installed Capacity	500 metric tons per year



Photograph shows the first test roll of tubular polyethylene film being produced at saJWare Synthetix

#### • Polyethylene Liners and Bags

saJWare can produce liners and bags using LDPE, LLDPE, HDPE, and any combination thereof. The bags can be produced per the specifications outlined below:

Single-face Thickness	0.008 to 0.10 mm
Width (Tubular film)	400 mm (~15.8 inches) to 800 mm (~31.5 inches)
Maximum Length	1,300 mm
Materials	HDPE, LDPE, LLDPE, and combinations thereof
Colors	Diverse palette available
Other Options	Custom length segments
Installed Capacity	Up to 100,000 bags per day



Photograph shows the first test liner produced at saJWare Synthetix

#### **Manufacturing Facility**

saJWare Synthetix's 15,000 ft<sup>2</sup>, state of the art manufacturing facility is one of the newest and the most advanced polypropylene bag manufacturing facilities in Pakistan. Located in the recently developed Phase-II of the Multan Industrial Estate, the facility is housed in a custom built all-steel prefabricated building.



Photograph shows the all-steel exterior of the saJWare Synthetix facility

The facility comprises of the following machinery:

#### **Extrusion**

• One high speed extruder with the following specifications:

Extrusion Capacity	395 Kg/hour
Screw diameter	100 mm
Screw L/D ratio	33:1
Screw rotary speed	20-120 rpm
Die width	1200 mm
Linear Speed	280 meters/minute
Installed Power	350 KW
Operating Power	170 KW
Speed Control	Automatic Synchronization
Management	Via Digital Panel
Gross Weight	28,000 Kg

Photographs of the extruder are shown on the following page.



Photograph shows the polypropylene sheet being produced by the extruder



Photograph shows the polypropylene sheet being cut by the extruder's cutting assembly

# Heating

• One five-meter tape heating oven



# Stretching

• Seven roller tape stretching unit



#### Winding

• 200 electromagnetically actuated automatic precision cheese winders.

Motor Power	Three phase
Winder Control	Electromagnetic
Max. Winding Speed	330 meters/minute
Brake	Manual
Speed Control	Digital Synchronization
Winding	Precision



Photograph shows less than half of the 200 electromagnetically actuated automatic precision cheese winders

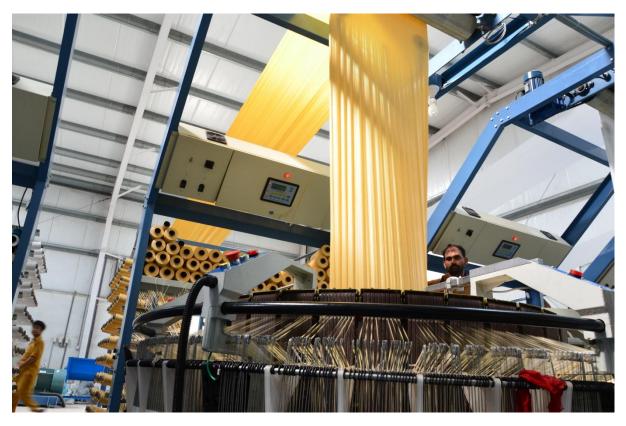
#### **High Speed Circular Looms**

• 14 high speed Plane Cam six-shuttle circular looms with the following specifications:

No. of Shuttles	6
RPM	0 – 170 rev/min
Power Consumption	3.0 KW
Folded Width	350 – 850 mm
Tape Types	PP and HDPE flat yarn
Max no. of Warps	720
Bobbin Size	38 x 230 mm
Operation	PLC Digital Control
Gross Weight	2,500 Kg



Photograph shows all the 14 High Speed six shuttle looms in operation



Photograph shows a high speed loom producing beige colored circular fabric for a client

# Mesh Bag Circular Looms

• Four (4) four-shuttle mesh bag looms with the following specifications:

No. of Shuttles	4	Weft Density	10-24 pcs/100 mm
RPM	0 to 75 rev/min	Bobbin Size	38 x 230 mm
Power	3.0 KW	Weft Winding Dia.	Max 90 mm
Folded Width	300 to 800 mm	Operation	PLC Digital
Tape Types	PP & HDPE	Motor Controls	Dual Inverters
Max Warp Count	512	Gross Weight	2,500 Kg





#### **Automatic Cutting & Sewing**

• One automatic high capacity cutting and sewing conversion line with the following specifications:

Machine Control	Digital PLC
Diameter Of fabric roll	Max. 1,400 mm
Width of fabric	300 to 850 mm
Cutting Length	600 to 1,350 mm
Cutting Length Accuracy	±1.5 mm
Bottom Folding Width	20 to 30 mm
Production Capacity	38 pcs/minute
Stitching Range	5 to 9 mm
Power	6.2 KW



Photograph shows saJWare's Automatic Cutting & Sewing machine preparing feed bags for a client

#### **Manual Cutting**

• Three cutting tables with electrically heated cutting elements.

#### **Manual Sewing**

• Four professional imported sewing workstations.

# **Printing**

• A four color printing machine (bag by bag) with a capacity of 2,000 bags per hour.



• A two color high speed printing machine (bag by bag) with a capacity of 4,000 bags per hour.



#### **Baling**

• One baling press with a maximum compression capacity of approximately 180 tons



Photograph shows the bag baling press at saJWare Synthetix

#### **Liner Production Line**

• One film blowing line with the following specifications:

Material	HDPE, LDPE, LLDPE, and combinations thereof	
Reduced Film Diameter	400 to 800 mm	
Single Face Thickness	0.008 to 0.10 mm	
Maximum Output	HD 55 Kg/hour, LD 66 Kg/hour	
Screw L/D	28:1	
Die Size	HD 80/100 mm, LD 180/200 mm	
Take up speed	10-100 meters/minute	
Winding speed	10-80 meters/minute	
Other Features	Rotary die head, Film Surface Treatment, & Auto Loader	

• One film cutting and sealing line with the following specifications:

Machine Control	Digital PLC
Max Width	950 mm
Max Length	1,300 mm
Speed	30-100 pieces/minute



Photograph shows the extrusion and winding sections of the Film Blowing line



Photograph shows the freshly blown film being transported to the take-ups via the cooling chamber



Photograph shows the take up section of the Film Blowing line



Photograph shows the automatic liner cutting and sealing machine

# Finished Goods Storage Area

• A covered area of approximately 1,800 ft<sup>2</sup> is available for storing finished goods.



# **Raw Materials Storage Area**

• A covered area of approximately 1,800 ft<sup>2</sup> is available for storing raw materials.



#### **Target Market**

The Synthetix division produces polypropylene packaging that caters a broad range of sectors. Some of the markets that are an immediate focus include Fertilizers, Textiles, Sugar, Rice, Wheat, Flour, Feeds, Seeds, Fibers, Cotton, detergent manufacturers, and local packaging material merchants. Our mesh bags can be used by fruit and vegetable suppliers operating in domestic as well as export markets.



#### **Raw Material & Suppliers**

saJWare's high speed extrusion and weaving machinery is optimized for the highest quality, tapegrade polypropylene. Given this and our stringent quality assurance policy, saJWare has made a commitment to use top-grade, 100% imported raw material that is supplied by the top names in the industry. As a result, the company usually imports raw material directly from the foreign suppliers.



Photograph shows a recently unpacked pallet of polypropylene resin bags from SABIC

Our suppliers include Saudi Basic Industries Corporation (SABIC); Qatar Chemicals Company Ltd. of Doha, Qatar; PT Halim Samudra of Indonesia; CCC Chemical Commerce Co, Ltd. of Thailand; and Clariant Pakistan Limited.









CCC Chemical Commerce

Company Limited

#### Quality

In line with saJWare's quality assurance (QA) policy, the team at the Synthetix division enforces zero tolerance for compromises related to the quality of the final products. No exceptions are tolerated. The policy is well understood at all levels of our team and is reiterated on a regular basis. In the rare event that a product with QA issues does make its way to the end user, saJWare assures its clients that it will support them to the maximum extent that it deems realistically attainable.



To realize the QA policy above, in addition to a strictly enforced QA process, saJWare has acquired extensive laboratory equipment, some of which is listed below:

#### • Floor-type Computer Controlled Material Testing Machine

This computer controlled machine is capable of conducting a wide range of tests on tapes, fabric, bags, films, and liners. Tensile testing, compression testing, tear testing, bend testing are some of the tests that can be conducted. All test results are displayed using Physical Test Solutions' MaxTest software. The machine is certified to international standards including ISO, ASTM, DIN, and JIS.

- XNR Digital Melt Flow Indexer
- Digital Measuring Reel Tester
- Circular Sample Cutter
- Various Micro balances
- Inspection Lighting and Lenses
- Calipers and Micrometers

All quality assurance data is frequently collected and stored in the company's proprietary Enterprise Resource Management System on a daily basis and is reviewed at all levels in the organization.

#### **Farm Equipment**

The Farm Equipment division has introduced modern, affordable, high quality agricultural equipment in Pakistan that is backed by a prompt, supportive customer service team.



Photograph shows the Quattro 2500 – a Fimaks product that is exclusively distributed by saJWare in Pakistan

Since its inception in 2006, this division has grown to make saJWare, Pakistan's largest dairy machinery importer with customers in all segments of Pakistan's dairy industry. The division has established a strong reputation for delivering timely, high quality customer support. It is now undergoing expansion with the introduction of new machinery and the addition of domestic dealers for its product line.

#### **Manufacturers**

The Farm Equipment division exclusively represents the following international manufacturers:

#### • Fimaks Makina A.S.

Bursa-Karacabey, Turkey based Fimaks is one of Turkey's top agricultural machinery manufacturers that specializes in the design and production of mechanical equipment used to support dairy farm operations. In 2006, saJWare signed an exclusive distribution agreement with Fimaks in Turkey and introduced the brand in Pakistan. Today, saJWare has earned Fimaks the status of the leading dairy



machinery supplier in Pakistan by providing quality sales, service, and marketing support.



Photograph shows saJWare directors at the signing ceremony of the exclusive distribution agreement between saJWare and Fimaks. The event was held at Fimaks headquarters in Bursa-Karacabey, Turkey in April 2006.

#### • EYS Metal Ltd.

EYS is an Aydin, Turkey based solutions provider for industrial dewatering and composting systems. It serves a range of industries where separated solids and/or liquids from the original fiber-rich waste can be reclaimed as either by-products or to be fed back into the main process. In 2008, saJWare signed an exclusive distribution agreement with EYS and is in the process of introducing the brand in Pakistan's evolving semisolid waste processing industry.



#### **Support**

Client success is at the core of saJWare's mission. For its clients to be successful, saJWare understands that helping them get the right equipment is only the first step. They have to be supported throughout their project's lifecycle. Because of this, saJWare has invested significantly in after sales support and has earned a solid reputation for on-field servicing and parts delivery. In addition to maintaining an active stock of spares, saJWare's support team receives periodic maintenance training from the manufacturers. To further enhance our support services, saJWare has recently established a customer support base in Okara, Punjab to better support customers in Central and Northern Punjab.

#### **Products**

The Farm Equipment division's product range can be categorized into five separate categories. These are described below. Detailed product descriptions are available at <a href="https://www.sajware.com">www.sajware.com</a>.

#### • Cultivation and Growth

This category comprises of equipment used for preparing agricultural fields, the sowing process, and for nourishing the crop during its growth phase. Products included are the Para Plow, Flail Shredder, Seedbed Tiller, Vegetable Seeder, Mulch Laying Machine, Over Transplanter, Standard Transplanter, Pneumatic Seed Drill, Fertilizer Spreader, and Sprayer.



Photograph shows the Fimaks Flail Shredder at a field in Turkey



Photograph shows the Fimaks Para Plow at a field near Bursa, Turkey

#### • Harvesting

This category comprises of equipment used for harvesting crops, handling the harvest, and related tasks. Products included are the Forage Harvester, Maize Harvester, Row Independent Harvester, Rotary Disc Mower, Drum Mower, Hydraulic Forage Trolley, Rotary Tedder, Hay Rake, Tractor Mounted Forklift, and the Log Splitter.



Photograph shows the Fimaks Single Row Maize Harvester. More than 200 are in use all over Pakistan.



Photograph shows the Fimaks Disc Mower at a field in Turkey



Photograph shows the Fimaks Forage Harvester. More than 100 are in use all over Pakistan.



Photograph shows the Fimaks Rotary Rake at a field in Turkey

#### • Feeding

This category comprises of equipment used for preparing and delivering cattle rations such as the Total Mixed Ration (TMR) and raw silage. Products included are the Feeder Mixer, Bale Shredder, Bale Unroller, and the Silage Distributor.



Photograph shows the Fimaks 20m<sup>3</sup> Feed Mixer at a dairy farm in Karacabey-Bursa, Turkey



Photograph shows the Fimaks 5m<sup>3</sup> Feed Mixer unloading a TMR diet to cattle at a farm in Turkey

#### • Milking & Caring

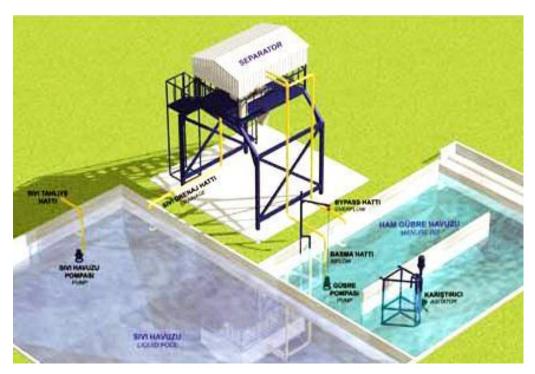
This category comprises of equipment for milking, enhancing cow comfort, and improving barn environment and herd health. Products included are the Portable and Bucket Milking Machines, Pipeline Milking systems, Milking parlors, Head lock units, Free stall units, Cow mats, Water bowls, Cow brushes, Cooling systems, Mastitis kits, and Teat dip cups.



Photograph shows variants of the portable milking machine that are distributed by saJWare

#### Cleaning

This category comprises of equipment used for cleaning the barn environment and improving the farm's overall hygiene standard. Products included are the Barn Scraper, Dairy Sweeper, Manure Spreader, Screw Press Separator, Submersible Agitator, Slurry Pump, Effluent Pump, and the Effluent Clarifier.



The above diagram shows a sample installation of the EYS de-watering and semi-solid waste separation system

#### **Events**

As the largest distributor of dairy farm equipment in Pakistan, saJWare has been invited to and/or has participated at several local and international industrial events related to the agriculture and dairy industry. Amongst these are the Middle East-Pakistan Agriculture & Dairy Investment Forum 2008 in Dubai as well as the China Beverage Exhibition on Science and Technology 2009 in Shanghai.









The top photo shows saJWare's Husain Mustehsan at the Middle East-Pakistan Agriculture & Dairy Investment Forum 2008 in Dubai. The middle-left photos show him at the CBST 2009 in Shanghai. The bottom photo shows him with Punjab Governor Khalid Maqbool at saJWare's exhibit at Bahauddin Zakariya University's R&D event in 2006. The middle-right photo shows saJWare's Sajjad Mustehsan with Turkey based EYS Inc.'s GM, Erinc Ogutcu, at an agreement signing event between saJWare and EYS at Tysons Corner, Virginia in 2008.

#### **Agriculture**

Agriculture is at the core of saJWare's business. In fact, our entire business touches agriculture in one form or another. Our leaders as well as many members of our management have gained hands on experience with farming at some point in their careers. As such, it is only a natural occurrence for the company to have an agriculture division that practices modern agriculture techniques and contributes towards improving farming practices in the country.

saJWare owns and operates a dedicated 100 acre agriculture farm that is located in Punjab's district Lodhran. The farm is currently involved in dairy farming as well as traditional rotational farming covering regional crops including cotton, wheat, sun flower, and maize. Agricultural produce from the farm is typically sold to local as well as multinational dairy processors, ginneries, flour mills, oil mills, as well as commodity brokers. The farm also contributes to the region's academia by hosting students from local colleges and universities as well as employees from local and multinational firms during on-farm lectures and demonstrations.







The top photo shows a cotton field at the farm. The lower left photo shows an ultra-light aircraft getting airborne from the farm's temporary airstrip during a ULV crop dusting mission. The lower right photo shows a sunflower field.

#### **Dairies**

saJWare Dairies is an initiative aimed at producing high quality organic milk. The farm has a growing herd of 180 Sahiwal-Holstein dairy cattle (25:75 breed mix ratio) that has been supplying milk to major processors since 1999. The company maintains a sizeable fleet of Fimaks' cultivation, harvesting, feeding, and milking machinery. As a result, the farm also serves as a demonstration, training, and storage site for the company's Farm Equipment division.

To enhance and expand its operations, the dairy division is currently developing a state-of-the-art facility in Lodhran, Pakistan. Construction of the facility started in 2006 and many infrastructural components including above-ground silage bunkers and the main shed have already been constructed. Feeding and milking machinery has been acquired as well. Upon completion, the farm is expected to add 86,200 ft<sup>2</sup> of dedicated physical structures that will be spread over a six acre lot. This should be sufficient to support a herd of 600 animals. An on-farm processing facility to produce pasteurized milk is planned as well.







The top photo shows the main shed at the new saJWare Dairies facility. The lower left photo shows a Holstein cow at the farm. The lower right photo shows silage production at one of the farm's above-ground silage bunkers.

#### **Academic Mission**

saJWare lays great emphasis on its academic mission. As a result, the farm has hosted a large number of local and international delegations in support of their learning objectives. Several workshops and demonstrations have been held on topics related to cotton and wheat production; pest management; herd genetics, environment, and nutrition; silage production; round baling; mechanical forage harvesting; milking and harvesting machinery maintenance etc. To organize many of these workshops and demonstrations, the company has utilized the services of foreign experts including dairy experts from South Africa and New Zealand as well as maintenance engineers from Turkey and China.

Recently the farm hosted agriculture students from Islamia University, Bahawalpur. A lecture on genetics, environment, and nutrition was delivered along with a tour of the existing and upcoming dairy farm infrastructure. The company intends to further expand its academic mission.







The top photo shows saJWare's Husain Mustehsan with students and faculty from Islamia University Bahawalpur during their visit to saJWare Dairies in January 2011 for attending a lecture on Genetics, Environment, and Nutrition. The lower left photo shows a round hay bale produced at the farm during a round baling demo in April 2007. The lower right photo shows attendees at the silage production demo held at saJWare Dairies in October 2006 in collaboration with Nestle.

#### **Real Estate**

saJWare has been working with real estate in a non-commercial capacity since its founding. The company has been a part of a sizable number of rental, acquisition, and construction transactions involving the entire spectrum of real estate markets in and around the city of Multan. After gaining some experience, the company launched its first commercial development project under the trade name "Gillani Town".



saJWare has worked with clients in the luxury residential rentals market, rural investment market, commercial and industrial procurement market, as well as residential, commercial, and industrial construction markets.

#### **Development Project**

saJWare launched the Gillani Town project in the outskirts of Multan in 2007. The project aimed at providing sustainable living conditions to low income communities at an affordable cost. The project comprised of residential and commercial parcels that were laid out according to a professionally designed plan. To minimize the cost burden, saJWare offered an interest-free payment plan. The project was an immense success with 90% of the parcels being sold in less than 90 days.



Photograph shows members of the saJWare team during their visit to the then under construction Gillani Town in 2008

#### **Services**

The saJWare team is capable of providing a full spectrum of services including rentals, construction, and brokerage in the residential, commercial, industrial, and agriculture real estate markets. Our team is familiar with all legal and technical procedures; thereby ensuring client satisfaction.

#### **Information Technology**

saJWare is passionate about technology and lays great emphasis on its information technology endeavors. Although the company is not actively pursuing IT opportunities in Pakistan, it is backing a California based software venture as well as continuing work on internal projects that support its manufacturing, agriculture, and farm equipment divisions.

#### **Capabilities**

saJWare is capable of supporting the entire software development lifecycle. It can provide intelligent designs and can implement them using a wide range of technologies including Java, C#, PostgreSQL, Hibernate, Flex, MySQL, ArcGIS, Android, JavaScript, HTML5, and Python.



#### **Current Projects**

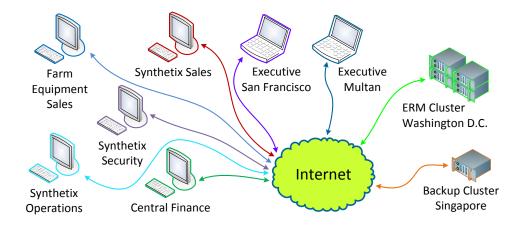
saJWare's recent focus has been on developing technologies to support its internal operations as well as its marketing efforts. As a result, the company has recently built and deployed its Enterprise Resource Management (ERM) system and has unveiled a new version of its website.

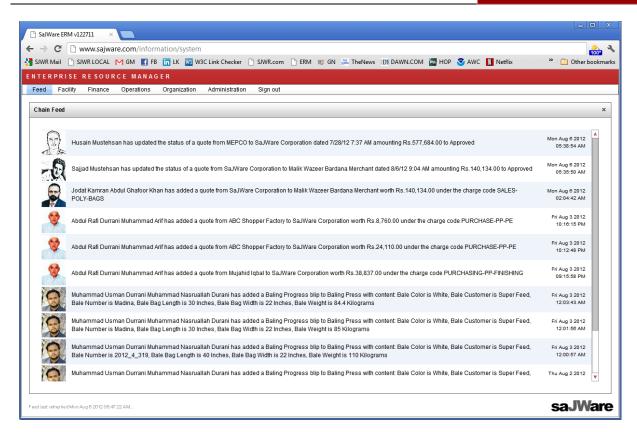
#### • Enterprise Resource Management (ERM) System

The ERM system unifies saJWare's finance, security, facility management, operations, and supply chain departments across all of its divisions. It provides real-time insight into activities taking place throughout the company and can be securely accessed from anywhere in the world. It supports multiple client-nodes that are located across saJWare facilities.

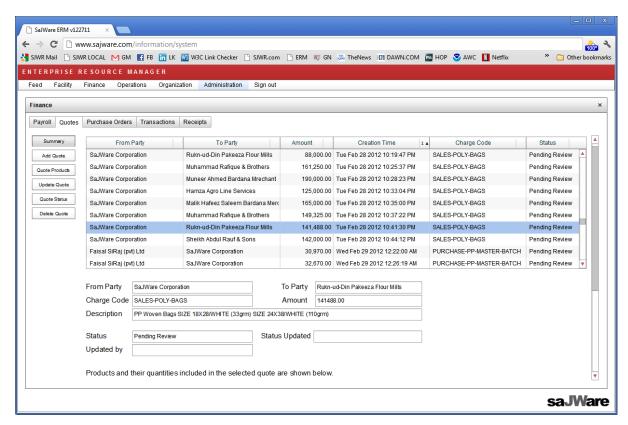
Data entered by users is encrypted and shared with other users based on a well-defined set of security policies. As the system is cloud based, no data is stored at any of the clients. The system can be customized on-the-fly to ensure that it reflects the company's dynamically changing organization at all times.

saJWare built the system in 2011 after a six month effort involving 137,000 lines of code in six different languages i.e. Java, ActionScript, HTML, JavaScript, SQL, and XML.

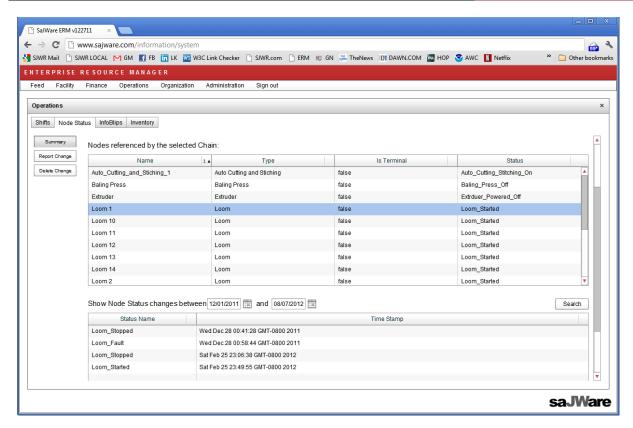




The screenshot above shows the ERM system's social media inspired chain feed



The screenshot above shows the ERM system's quote summary page



The screenshot above shows the status of various machines at saJWare Synthetix

#### • SAJWARE.COM

saJWare.com, the company's official website, was first developed in 2004. Its current version is its third. It comprises of 70 pages and is hosted on Amazon's EC2 Cloud.





The screenshots above show the fourth version of www.sajware.com as of August 6, 2012

#### **Past Projects**

Between 2004 and 2006, saJWare worked on a few projects in the domestic defense and law enforcement realm. Amongst these, the Integrated Battlefield Management System (IBMS) prototype was the most significant. It was built in response to a request from Heavy Industries Taxila (HIT) in September 2004 and was intended for the locally manufactured Al-Zarrar and Al-Khalid battle tanks.

The prototype developed by saJWare was a fully functional system that offered a subset of the features to be included in the final IBMS project. It allowed each tank to see other tanks in the vicinity in real-time as overlays over satellite imagery. It also allowed each tank commander to exchange text messages with other tanks as well as command posts. The prototype also included touch optimized zooming, panning, and distance measurement tools.

After a tireless development effort spanning less than 45 days, the system was installed on three tanks and a command post and was successfully demonstrated to HIT's entire leadership at their test track.



The screenshot above was captured in 2007 during a live demo of the IBMS in Pittsburgh, Pennsylvania.

#### Clientele

saJWare has a continuously growing client base. Presented below are a few featured clients. A complete list featuring all of the 250+ clients as well as end user references is available on request.









































































# **Banking References**

Upon request, saJWare and its directors can arrange bank references from the following banks:











#### **Contact Information**

saJWare owns and operates multiple facilities in Pakistan's southern Punjab region. Details for each of these facilities are provided below:

#### **Liaison Office**

The liaison office is located in the heart of Multan's cantonment area. It serves as the primary location for outside parties such as clients, suppliers, and business partners to initiate interaction with the saJWare organization. The office is staffed six days a week excluding national and local holidays. The contact information for this facility is as follows:

#### saJWare Liaison Office

139 Mall Plaza, Multan Cantt, Punjab 60000, Pakistan T: (92)-61-4783363, 4783364

F: (92)-61-4581801 E: info@sajware.com



#### **Synthetix Plant**

The Synthetix plant is located in Phase II of the Multan Industrial Estate and lies on the city's southern outskirts. The site serves as the primary production site for all of the company's synthetic products and is staffed round the clock. For security reasons, third party contact to this site is prohibited and as such, parties are required to contact the liaison office with site related affairs.

#### saJWare Synthetix Plant

52 Phase II, Multan Industrial Estate, District Multan, Punjab, Pakistan

T: (92)-61-4783363, 4783364

F: (92)-61-4581801 E: info@sajware.com



#### **Agriculture**

The farm is located near Adda Permit in the Lodhran district. The site serves as the production site for all the agricultural and dairy produce of the company. It is staffed year round. Parties are encouraged to contact via the liaison office instead of contacting the site directly.

#### saJWare Agriculture

3 KM Permit -Shujabad Road, District Lodhran, Punjab 59320, Pakistan

T: (92)-61-4783363, 4783364

F: (92)-61-4581801 E: info@sajware.com

