

The logo for Paradigm, featuring the word "PARADIGM" in a bold, italicized, yellow sans-serif font. The background of the slide is white with diagonal stripes in blue, yellow, and grey.

What Seems Impossible
Can Be possible :

*A Diversified Engineering
Solutions Provider*

The field of engineering is known for its diversity in providing numerous technological and problem-solving measures to an abundant of industries globally. Business and companies related to the field of engineering are also known to cater countless demands and needs by the industry. This is to ensure an ongoing progress in providing support and assistance to flourish this field as this field is globally required in the development of mankind.

Paradigm Precision Components Sdn. Bhd. is a one-stop engineering-solutions provider for a varied requirement on precision components in the field of semiconductor, aerospace, electrical and electronic, telecommunication, medical, and other growing industries around the world. This entity is known to have 20 years of experience in providing an array of engineering related solutions with effective cost and services from a workforce of 220 people.

It is no doubt that Paradigm offers a diversified engineering solution and is making way to numerous countries globally in business expansion. Some of the materials provided by Paradigm for the aerospace industry would be low carbon alloys, tool steels, and stainless steel which are used in avionics system and galleys in aircraft.

They also produce a range of medical devices that are used in ultrasonic tools and display casing as well as other health care devices. Additionally, they also provide laser engraving devices and electronic equipment assembly.



“Today we are well recognised by many entities in Penang and other countries. We started off solely as a semiconductor company and have branched out into aerospace and other industries. In fact, aerospace industry has contributed about 30% of business revenue on a yearly basis. The journey has been challenging but we have strived so far, and we believe we will strive further as we are unique in our own way,” said Terence Heng, the Vice President of Paradigm Precision Components.

Paradigm aspires to be a market leader in providing innovative engineering solutions to customers worldwide. In fact, they hold on to certain principles that outline agility, attitude, teamwork, initiative and accountability, ownership, continuous learning, and quick response.

These principles have been able to pave a pathway towards excellence and quality in their services. Till to date, Paradigm has marked its exports to North America, Europe, Singapore, Japan, Vietnam and many other countries around the globe.

These growths and business acceleration have brought many awards from reputable organisations namely Golden Eagle Awards in 2013 and 2014, SME Export Award in 2015, Industry Excellence Award 2016, and other distinguished recognitions.

Strategic plan towards progressive development

Business plan is a crucial aspect in an organisational structure as it is known to outline the pathway of business goals, individual duties, annual targets, achievements and forecasts strategic goals and objectives. A detailed business plan aids entrepreneurs in being specific to objectives and goals and ensures implementation at every step of administration.

Additionally, business plans assist in tracking challenges and benefit entrepreneurs in forecasting results or rectification acts. Ultimately it defines responsibilities and assures progress at every stage. Paradigm believes that its business plan is able to drive the organisation



through long-term plans and provide a clear direction to the business and its employees.

“We usually outline a 3-year plan, 5-year plan, and 10-year plan for our business development. We trust this will be able to bring us forward in our business. The top management at Paradigm leads in formulating long-term and short-term plans and focusing on 4S (Speed, Simplify, Systematics & Standardisation) that eventually guides the organisation towards manufacturing excellence,” said Terence Heng.

Paradigm is certain in having a liberal business plan and for that purpose it has outlined two major fragments of its business plan namely short-term plan and long-term plan. The short term plan is derived from a smaller scope of administration that narrows down to departmental goals and objectives.

The outcome at this level is also incorporated into the Key Performance Indicators (KPI) for every functional team. Such plan is expected to boost motivation and encourage employees to perform towards achieving goals and objectives set for every individual.

The functional teams at Paradigm are divided into eight divisions namely Human Resource, Finance, Sales, Planning, Production, Manufacturing, Quality Assurance, and Procurement & Logistics. Employees at these divisions work towards achieving their Key Performance Indicators (KPI).

For instances, the Human Resource Division holds responsibilities in sustaining workforce and attrition rates, the Finance Division manages net cash flow of the company and sustains a gross profit margin, and the Sales Division brings in new customers and sustains the Request for Quotation (RFQ) Success Rate.

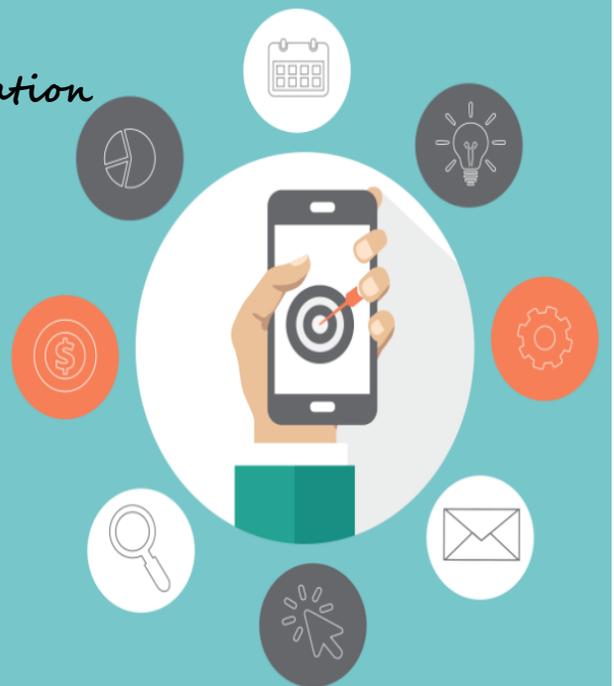
Following that, the Planning Division is required to ensure a 100% delivery rate and the Production Division prioritises an Overall Equipment Effectiveness (OEE) of more than 70%. On the contrary, the Quality Assurance Division aims at 100% customer satisfaction and the Procurement and Logistics Division targets a maximum cost reduction. Therefore, every division is held responsible and the teams ensure their targets are attained respectively.

These KPIs from departmental levels lead to achieving greater heights in the long-term plan at Paradigm which covers mission, vision, values, company goals, business development, and sales projection which are set by corporate directors. Following that it is also in line with the annual budgeting, quarterly operation strategy plan, and performance reviews which are delineated by the Head of Company (HOC).

The short-term plan and long-term plan coincide with one another to ensure the business plan in a bigger picture is able to achieve targets and goals for Paradigm. Paradigm has carefully structured its short-term and long-term goals to ensure they eventually lead to the success of business plan. Additionally, the strategic development plan also comprises of matters related to Human Resource Development (HRD) and investments on machineries and manufacturing system. These aspects are deemed significant in the overall development of the entity.

Specific Departmental KPIs and Targets *Towards A Comprehensive Administration*

- **Human Resource Division** : to sustain workforce and attrition rates
- **Finance Division** : to manage net cash flow of the company and sustain a gross profit margin
- **Sales Division** : to bring in new customers and maintain the RFQ Success Rate
- **Planning Division** : to ensure a 100% delivery rate
- **Production Division** : to achieve an OEE of more than 70%
- **Quality Assurance Division** : to attain 100% customer satisfaction
- **Procurement and Logistics Division** : to obtain a maximum cost reduction



“We projected productivity and cost savings among our employees through the implementation of 5S Lean program. Over the time, we were able to achieve what we aspire. In fact, employees appeared to be motivated as Paradigm witnessed outstanding achievements through all their initiatives,” Terence Heng enlightened.

Improving work processes through Kaizen

Paradigm focuses on quality in its products and concurrently looks forward in being competitive in its business. Paradigm has initiated the Kaizen approach in sustaining quality in all its products.

“Challenges are common in any business, and Paradigm is not an exception. We focus in sustaining manufacturing excellence and hence we adopted the Kaizen initiative to ensure a productive strategy within the entity. We have also been successful in implementing changes in the organisation and forming a resourceful and enterprising culture among all our employees. We think such a change is crucial in ensuring a continuous growth in a business,” said Terence Heng.

Initiatives through Kaizen which have been carried out on monthly basis have been able to tackle challenges and trail to solutions. This approach has been able to improve processes, machine utilisation and technology, and at the same time manage work force efficiently.

This also brought to effective monitoring of production performance within the entity which spreads across 60, 000 square feet. This activity is also in line with the ISO9001, AS9100 and ISO 13485.

“Kaizen activities have successfully brought significant changes in the manufacturing and production divisions. Most importantly, Kaizen activities have been able to lower the rejection rate from 5% to 1% and increase productivity to 20% and more. When we first introduced the Kaizen activities, we provided extensive training and briefings on the expected benefits,” said Terence Heng.

- 1 Kaizen activities have been able to lower the reject rate from 5% to 1%.
- 2 The productivity rate has increased to 20% and more after Paradigm implemented Kaizen activities.
- 3 The adoption of Lean Manufacturing Concept of Single Minutes Exchange of Dies (SMED) has recorded tremendous success in reducing 83% of time during the machine change process.

All activities in relation to the Kaizen method have been recorded in systematic templates that depict problem-solving tools and reflect on the reduction in manufacturing wastes. Achievements through Kaizen are not only instrumental to the entity but at the same time benefit the employees through shaping vibrant individuals into being more positive and confident in their everyday work.

Such evolution among employees is deemed crucial to form an enhanced entity and a stronger organisational structure within Paradigm. “In fact, we believe in listening to our employees as every improvement and feedback is deemed important. We usually conduct a forum among all employees every 3 months to specifically hear what they have to say,” he said.

“Not only that, even, our operators, are able to bring minor changes to accelerate performance at Paradigm. We do not have partitions in our office. If you walk through the office, you will be able to see that we emphasise on open communication as this is important in a liberal

working culture. We want this openness as we practice transparency and building resources towards affirmative mind-sets,” Terence Heng further went on.

Paradigm also encourages all employees to resolve issues pertaining daily operations through the team which is commonly known as Continuous Improvement Program (CIP). Employees from different divisions are brought together in this team to ensure a systematic brainstorming towards the betterment of the entity.

“Every year, Paradigm organises a seminar in which the most outstanding CIP team is given the opportunity in presenting their ideas and improvement projects. This competition is participated by all subsidiaries of our parent company. This is seen as a great platform as we are usually able to share our success stories to other teams and co-workers,” he said.

“In fact, we are also able to gain from other teams. For instances we were able to witness a success story of a champion CIP which was successful in adopting Lean Manufacturing Concept of Single Minutes Exchange of Dies (SMED) that recorded a tremendous success in reducing 83% of time during the machine change process,” said Terence Heng.

Progressive efforts towards positive changes and business expansions

Paradigm has been promoting its business to other MNCs around the world and indirectly bringing Malaysia to a global recognition and at the same time establish a supply chain network in this region.

Paradigm produces 150 new products on a yearly basis and has 1500 products to date. The company is convinced that these products are crucial in the business development as

Paradigm revolves around the engineering field which sees a vast progress of new products.

“Currently, 70 % of our products are exported abroad and about 30% is for local supply. The sale is expected to bring a 20% growth on annual basis as we are gaining full support from our customers,” said Terence.

In fact, Paradigm has assigned a team for technical and design-related works in order to develop and modify products that suit the market needs. A part of Paradigm’s strategic business development plan includes obtaining first-hand customer feedbacks to meet the expectations from clients and inculcate the feedbacks towards improvising their products.

“We strongly believe in obtaining a face-to-face customer feedback as this approach builds a strong rapport between Paradigm and our clients. Moreover, the development of new products or any sort of modifications done on existing products rely on the customer feedback. Therefore, feedbacks from customers are highly imperative,” Terence explained.

This entity is now moving forward towards the Industry 4.0 and is looking into business expansion in the near future. For an abundance of reasons, Paradigm believes that moving towards Industry 4.0 is extremely relevant and increasingly significant especially in the manufacturing field.

“We have grown from what we were 20 years ago to what we are today. A lot of changes and constant development and now we are expecting an increase in the number of our employees next year. We are looking at reaching about 300 employees as compared to the 220 employees we have now.”

“Not only that, we are also looking at automation in our work flow in the future. We look forward to promoting our entity within the region through local conventions and exhibitions. Additionally, we are planning to participate in the exhibitions and programmes organised by MPC next year. We hope all these plans will happen,” Terence concluded.