Adaption in Disrupted World
Gem and Jewelry Traders Hasten Adaptation to Tackle Disrupted Business World

Nowadays, gem and jewelry traders face many challenges from economic instability, swift changes of consumer behaviors, rapid technological advancements and global trends resulted from consumers, traders, manufacturers and environments. The aforementioned factors force changes. If businesses fail to adapt to the changes, they will disappear from the market. Those succeed in adjusting will survive. Thus, in order to move ahead of the changes, gem and jewelry entrepreneurs must constantly adjust and be prepared. Different adjustment alternatives for entrepreneurs are features in this article.

1) Manufacturing Base Relocation

The prolonged trade war between the US and China raised costs of companies with manufacturing bases in China. As a result, companies including gem and jewelry ones started to relocate their manufacturing bases to other countries with lower costs. Although the US and China reached their first phase of trade agreement in December 2019, the agreement does not contain enough element to ensure an end of the trade war. Many perceive it as a temporary trade war truce. As the situation remains uncertain, companies will keep seeking new manufacturing bases.
Many countries are likely to be targeted for gem and jewelry manufacturing relocation. Thailand, the world’s leading gem and jewelry trading and manufacturing center has renowned centuries-long diamond and colored stone cutting skills, great skills in jewelry production and competitive wage rates. India is another attractive country with experienced workers possessing diamond and colored stone cutting/polishing skills, globally recognized jewelry production capacity and relatively low wage rates. Vietnam has been receiving attention from many foreign investors because of its abundant workforce and low wage rates. Moreover, the country’s industrious workers have development potential due to the country’s strong foundation in handcrafted gold jewelry production. Investors can be granted trading privileges from free trade agreements and Generalized System of Preferences (GSP) in exporting to Vietnam’s trading partner countries of which privileges are still valid, for example, the US and European countries.

Additionally, entrepreneurs may consider investing in Southeast Asian countries. Myanmar has deposits of premium quality colored stones—rubies and blue sapphires—which are highly sought after in the global market. The country’s gem and jewelry industry has been under development beginning. Despite having abundant low wage rate workforce willing to work, production skill development is still needed. Indonesia is a country with great workforce with fair craftsmanship skills and moderate wage rates. The country is also known for being the world’s foremost silver jewelry producer. These countries also implement foreign investment promotion policy by offering privileges in various aspect to attract overseas investors. Thus, they are great choices for those who are looking for new jewelry manufacturing base.

Minimum Wage Rates

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<td>Vietnam</td>
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<td>Myanmar</td>
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<td>USD 140/month</td>
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<td>Indonesia</td>
<td>USD 122-305/month</td>
</tr>
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2) Business Operation with Transparency and Social Responsibility

Recently, social and environmental responsibility as well as business operation with righteousness and transparency trends have often been addressed in different medias. Consumers, particularly younger generations in the US and European countries, place importance on the issues. Before making their decision to purchase a product, consumers ask about a gem and jewelry item’s origin. Therefore, related agencies as well as gem and jewelry traders give priority to operating business with righteousness and transparency as well as care more about social and environmental impacts.

As for gem and jewelry products’ origin inspection, IBM employs a blockchain system to track jewelry supply chain. De Beers uses a blockchain technology to inspect diamonds’ origins. Everledger has collaborated with Gübelin and many companies to develop a blockchain system, Provenance Proof, to track origins of colored stones. The system has been available for use among related partners.
Various technologies have been used in different businesses for product and service development to fulfill consumer demand. In gem and jewelry industry, innovation and technology has been gradually applied because the industry is a craft economy and creative economy, which most of its manufacturing process depends on skilled and creative workers and meticulousness. However, it cannot be denied that technology is apt to increasingly play an important role in the industry. Thus, if entrepreneurs can apply technology into their businesses, it may create success opportunity. On the contrary, if they fail to promptly adapt to technological and innovative changes, their businesses may risk disappearing from the market. Examples of innovations and technologies initially used in gem and jewelry industry these days are as follows.

Moreover, Alrosa and Everledger have launched, WeChat Mini, a program tracking origins of diamonds from mines to retailers. However, the uses of such technologies are still on an initial stage. They still need to be improved for better efficiency. Thus, entrepreneurs should adopt a system, which inspect routes of gem and jewelry products or buy/import raw materials for gem and jewelry from companies which provide goods origins. They may consider joining Responsible Jewellery Council or RJC, which forms standards or code of practices for transparent and ethical business operation, to show intention to follow the transparent and ethical business practices. At present, RJC has around 1,100 members. Its annual membership fee rates vary according to business categories.¹

If entrepreneurs want to avoid social and environmental impacts from mining, they may shift to recycled gold and gemstones. Many traders across the world have joined the recycled jewelry trend. An example of successful traders is Hoover and Strong, an American brand, which launched a jewelry collection called Harmony Metals and Gems. The collection received positive feedback from customers. Moreover, entrepreneurs can also use lab grown diamonds and colored gemstones.

3) Technology Application

¹ https://www.responsiblejewellery.com/applications/membership-fees/
3D printing process in jewelry production from the first to the last step.

**3D Printing** is a technology which started to play a role in jewelry production from the first to the last step. It reduces jewelry manufacturing process, costs and time, so products can be distributed to the market faster. The technology creates three-dimensional jewelry prototypes from collected design data for unique design concepts and diversified prototype designs. The 3D printing technology can also quickly produce multiple jewelry prototypes of various designs in one time.

3D printing trend in the industry is booming and it is likely to grow further in the future. ReportLinker predicted that the global jewelry market using 3D printing technology would grow 26% in 2023. This is because the technology does not just expand designers’ creativity enabling companies to produce products in various designs, but it also fulfill modern consumers’ demand for products expressing their individuality or customized products. Consumers can design and create their own one-of-a-kind pieces. Currently, many companies around the world use 3D printing technology in their businesses. For instance, Orori, an Indonesian company with an online store offering a service allowing customers to print diamond or colored stone jewelry with their desired diamond and colored stone shapes and jewelry patterns from choices available on the company website, which supports display on computers and smart phones. The store will then produce diamond and colored stone jewelry with a 3D printer after receiving customers’ orders. In 2014, American Pearl, a famous brand from New York, announced that it would produce 3D jewelry. Its customers can design their own jewelry with 3D printing technology.

**CNC Machining** is a computerized manufacturing technology. A drill carves material out of a block to get a desired piece. The technology is popular in jewelry industry in countries such as China, Europe and Thailand. It has been increasingly used in India’s jewelry industry.

**SOURCE:** HTTPS://FORMLABS.COM/BLOG/3D-PRINTED-JEWELRY/

**SOURCE:** HTTPS://WWW.FAMISOURCING.COM
AI (Artificial Intelligence) is a program written and developed to be able to think, analyze, plan and decide by processing a result from a large database. It helps buyers to be able to predict each consumer’s behavior and send message to much appropriate demographic. As one of the hottest new technology at present, entrepreneurs in almost every industry use AI to drive their business. Gem and jewelry industry no exception. It has become active in using the technology, for example, diamond industry uses AI in diamond grading to ensure accuracy. AI escalates accuracy in diamond identification. Sarine has designed Sarine Clarity™ to automatically inspect diamond clarity. AI is also used to boost confidence in online shopping as Diamond Pro, a consultant company from Switzerland, has developed Ringo, the world’s first AI helping online diamond shoppers to buy diamonds from the best options regarding certifications, diamond shapes, jewelry settings and types of precious metals used for jewelry settings. RockHer, an engagement ring manufacturer in California, is another company using AI called ROSI to help enhance customers’ experience in online diamond ring shopping. ROSI is a digital gemologist providing the most suitable diamonds for customers. Shoppers have to answer questions about preferred diamond shape and budget before ROSI analyzes and shows the most appropriate choices for them.

A sample result from ROSI’s analysis

Digital Ring Sizer called PerfectFit is an application designed by Radius Technologies and compatible with IOS and Android mobile phones. The application provides accurate ring size measurement within one minute. It can be used by turning on the application on the phone then choose your gender. Place a finger on the screen and press on the plus or minus sign to define finger circumference. PerfectFit supports every e-commerce platform on mobile phones.

ERP Software is a program, which many companies in gem and jewelry industry uses in business management from production, design, inventory management, sales analysis, customer relationship management, company financial and accounting management, product packing to product delivering.
SynthDetect is the latest tool invented by International Institute of Diamond Grading and Research (IIDGR) to inspect loose and mounted gemstones. The tool can examine colored and colorless gemstones of any sizes. The innovation won the 2018 Industry Innovation of the Year for Diamond Testing Technology from JNA Awards. In addition, companies in the US, Europe and India created diamond inspection tools of different qualities and prices for entrepreneurs to choose.

With increasing popularity of online shopping among modern consumers, every business, including gem and jewelry business, has hopped on the e-commerce bandwagon. Although jewelry selling through online and digital media channels accounting for only 5% of the overall jewelry market, it has been expected to reach 10-15% in 2020. Orbis Research estimated that from 2018 to 2022 the global online jewelry would grow with an average rate of 15.69%.

However, some customers will not instantly buy jewelry online. Instead, they will search for product information and compare prices on the Internet, look and touch real product pieces, before making their decision. Therefore, entrepreneurs should not completely cut off traditional stores. Merging both channels or omni-channel should be done.

Current online product trading includes opening one's own online store or placing products on e-commerce platforms. The followings are some major gem and jewelry trading platform. ETSY is a website suitable for handcrafted jewelry with a product listing fee of 0.20 US dollar for each item and transaction fee of 3.5%. The Wanelo Shopify is an e-commerce application on mobile phones with store opening fee starting from 29 US dollars per month. BigCommerce, a platform fitting for small business, offers 3 types of stores with fee rates of 29.95, 79.95 and 249.95 US dollars per month. TrueFacet, a platform selling used or secondhand products, requires 18-20% fee from sellers after a purchase is made. eBay, a very popular platform, online channels have made the jewelry industry shine and sparkle (December, 2019).
In this increasingly fast progressing digital world, consumer behaviors have changed tremendously. Consumers in this era usually search for product information online before making decision. They also expect prompt response from sellers. Therefore, social media marketing is the best choice in sharing daily information, special offer announcement and important news about products or services, which consumers cannot find on other places, as well as interacting with customers right away. Thus, it is the most popular marketing channel among every business. Favored social media platforms for gem and jewelry marketing are Facebook, Instagram, Twitter, YouTube and Pinterest. Entrepreneurs should study each trading channel in order to choose the most appropriate channel and sell their products on various channels to expand opportunity in boosting gem and jewelry sales.

5) Social Media Marketing

Examples of jewelry listed on ETSY and TrueFacet
on Facebook, users have the highest response during weekends.

Small and big jewelry brands have increasingly turned to social media marketing. Brands with success in the marketing approaches include BVLGARI. The luxury jewelry brand launches marketing campaigns through Instagram (8.4 million followers) and Facebook (3.40 million followers). David Yurman, a famous American jewelry brand, carries out marketing activities on Facebook (624,430 followers) and Instagram (353,000 followers).

6) Business Partner Collaboration

Under intense competitions, it may be hard for a business without a partner to be successful, if the company does not have enough strengths. Entrepreneurs started to employ strategy of collaborating with partners, which could be partners of different businesses to enhance each other’s strengths. For example, QVC, a retail company with the largest and the most diversified platforms of the world, carries out its primary business as a shopping channel on TV. It has expanded its marketing channels to social medias such as Twitter, Facebook and Instagram. The company also sells products on its e-commerce platform. Though QVC does not produce its goods, it is a supplier of different products, including gem and jewelry products from manufacturers, to sell through its platforms. QVC has a long-termed collaboration with its jewelry business partners, namely Kelly Hoppen and Liza Snowdon. Therefore, manufacturers with weakness in marketing channels can increase sales by collaborating with partners with solid marketing channels.

Partnering with non-benefit agencies or organizations such as social agencies or educational agencies to implement projects aiming to help the society and environment, highly concerned by modern consumers, will build good image and trust for a company and its products. This will eventually boost brand value and promote it much extensively. For example, Pandora, the world’s key silver jewelry brand has partnered with UNICEF in a fundraising project to help children affected by catastrophes around the world to protect and promote children’s rights, so they can live safely, healthily and receive quality education to develop their fullest potential. As such cooperation will become more important, entrepreneurs should adopt it with their businesses for sustainable advantages and business opportunities.

Furthermore, entrepreneurs and/or business operators need to adapt to survive by using the mentioned alternatives. Personnel of gem and jewelry industry also have to adjust as job conditions and skills will be changed in the future. This is due to rising percentage of technology usages in gem and jewelry business. Workforce in the industry have to possess “new set of skills” – skills for working with machinery involving technological innovations. If they want to remain in the industry, they must learn more technological skills.

Existing and future challenges and changes make adjustment to cope with changes become an undeniable solution for business and workforce. Failing to adapt now, they will become stagnant and eventually fall behind.
Economic Information of Key Trading Partners

Online Trading Value in Global Key Markets in 2019

- Gem and jewelry trading accounted for around 4-5% of gross online trading value. It is anticipated that a growth rate of approximately 10-15% will be seen in 2020. Renowned global brands will grow favorably.

Source:
- https://www.shopify.com/enterprise/ecommerce-fashion-industry
- https://www.jpmorgan.com/merchant-services/insights/reports/india
## World’s Gem and Jewelry Export Value Ranking

### Jan - Dec 2019

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank</th>
<th>Value (million USD)</th>
<th>Share (%)</th>
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### World’s Polished Precious Stone Export Value Ranking

### Jan - Dec 2019

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### World’s Polished Semi-Precious Stone Export Value Ranking

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### World’s Silver Jewelry Export Value Ranking

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### World’s Gold Jewelry Export Value Ranking

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</table>

Source: Global Trade Atlas, data processed by The Gem and Jewelry Institute of Thailand (Public Organization)
The World’s Top Diamond Producing Countries

Canada

Canada is the world’s third largest diamond producing country with several diamond mines in many of its states. Its main diamond mines are Diavik, Ekati and Gahcho Kué in the Northwest Territories. Ekati is Canada’s first surface and underground diamond mine and one of the world’s largest mines. It produces around 7.5 million carats of diamonds each year and has an estimated diamond reserve of 105.4 million carats.

DR Congo

Congo is the world’s fourth largest diamond producer. In 2018, it produced 16.4 million carats of diamonds. Its major diamond mine is Miniere de Bakwange (MIBA) in Kasai-Oriental province, a joint venture between the government of Congo (80%) and Mwana Africa PLC (20%).

Angola

Angola has three diamond mines. The largest one is Catoca, situated near Saurimo in Lunda Sul province, 840 kilometers east of Luanda. It produces around 7.65 million carats of diamonds each year, with an estimated reserve of around 130 million carats.

Brazil

Brazil has been the world’s leading center of diamond production for three centuries, with a large number of diamond mines spreading over many states including Minas Gerais, Mato Grosso do Sul, Bahia and Rondônia. It is also famous for fancy diamond production. Diamonds in various colors can be found in many locations, including alluvial diamond mines in Minas Gerais. The colors found are pink, yellow, red, blue and many others.

Namibia

Namibia is one of the world’s leading producers of quality diamond. Most diamond deposits are located in its territorial waters with an estimated reserve of around 80 million carats. In 2018, Namibia produced 2.4 million carats of diamonds. Diamond accounted for 20% of its overall export in terms of value.

South Africa

South Africa is one of the world’s leading diamond producers with several diamond mines. The largest one is Venetia, which is located 80 kilometers from Limpopo province, with an estimated diamond reserve of 92.4 million carats.
India is another country with several diamond mines. One of the most important and well-known is Majhgawan in Madhya Pradesh, owned by the National Mineral Development Corporation (NMDC). Its production capacity is at around 84,000 carats per year. Kollur Mine in Golconda region, Andhra Pradesh, produces diamonds known as Golconda Diamonds. It is the most productive diamond mine in India, which yields diamonds with exceptionally high transparency rarely found in other sources.

China has several diamond mines. Most are in Wafangdian and Linyi in Shandong province, and Wafangdian has the largest high-quality diamond reserves in the country. In 2012, a new diamond deposit was found at Shenyang in Liaoning province, where around 1 million carats of diamond reserves are expected.

Australia is one of the world’s most important diamond producers. Argyle is the country’s largest diamond mine which produces 90% of the world’s pink diamonds. However, due to decreasing production rate, the mine’s owner Rio Tinto plans to end its operation at the end of 2020. A remaining diamond mine is Merlin Diamonds Mine in Northern Territory, which still maintains its level of production capacity.

Indonesia has South Kalimantan as its important diamond production center, especially in Martapura, or as known among Indonesians as “The Diamond City,” where several diamond mines are located in Cempaka District. Now Martapura is also Indonesia’s center of diamond polishing and jewelry production.

Russia is the world’s largest diamond producing country with a number of small and large mines. Russia’s (and the world’s) leading diamond mines are Aikhal, Nyurba, Lomonosov, Yubileynaya and Mir. Aikhal is the world’s largest diamond mine located in Sakha Republic. The mine produced 12 million carats of diamonds in 2018 and has an estimated reserve of 175.56 million carats. ALROSA operates 97% of diamond mines in Russia.

Botswana is the world’s second largest diamond producer. Its largest and oldest diamond mine is Orapa in Eastern Botswana, situated around 240 kilometers west of Francistown. It is estimated that 131.2 million carats of diamonds are in this mine. Jwaneng is another large mine in this country, situated South Central Botswana, 257 kilometers southwest of Gaborone. It is a joint venture between De Beers and the Botswana government, with an estimated diamond reserve of 166.6 million carats.

Lesotho is a small country in Africa, but it has one of the world’s largest diamond mines, Letseng, which is a joint venture between Gem Diamonds (70%) and the Lesotho government (30%). The mine produces high quality blue and pink diamonds at around 6.7 million carats per year.

Zimbabwe presumably has the richest diamond resources in the world. Its two major mines are Marange diamond fields and Murowa diamond mine. The Zimbabwe government expects that its diamond production will increase from 3.2 million carats in 2018 to 11 million carats in 2023. Meanwhile, the US government has banned the import of rough diamonds from Zimbabwe since October 2019, claiming that forced labor is being used in its mining industry.
Jewelry Designs: Inspiration with Added Value

Today’s consumers are bombarded by an endless variety of trends like countless waves consistently breaking upon the shore. Technological innovations successfully capture people’s attention in all aspects of life, bring about rapid changes and disrupt the old solutions that no longer offer added value or serve consumers’ demand. Many industries, including gem and jewelry, are obliged to adapt and transform. However, they are not only adapting to emerging “sciences”, but also applying “the arts” to add value to their products.

The Art of Gem and Jewelry

Most gem and jewelry companies mainly focus on decreasing production cost and increasing productivity, which is just a minor aspect of the whole manufacturing process. Could it be better if companies aim to correct critical errors in their production and add value to their products instead? There are a large number of gem and jewelry companies around the world, but only a few are well known to the public. One of the factors that differentiate these brands is their unique designs. Many surveys reveal that good product design is a priority for Millennials, the largest group of consumers in today’s market. Therefore, design is one of the most essential and indispensable elements in all kinds of products, from clothing and jewelry to electronics and home decoration items.

Apart from marketing and production, design is the key to branding. Why do customers find products from Tiffany & Co. so appealing? Or why is David Yurman an influential powerhouse in this industry? The reason is that they always place emphasis on product design. In 2019, the top 15 designer jewelry brands are as shown in the following picture.
David Yurman is a living legend and a source of timeless inspiration. He applies innovations and craftsmanship from years of experience to create the world’s leading jewelry and watch brand with its own unique identity. He stepped into the world of gem and jewelry since high school by learning how to weld from a sculptor in Provincetown. His love of art led him to meet his future wife Sybil Kleinrock, who shares the same passion. While they were seeing each other, he made a bronze Dante necklace as a gift for her. The necklace brought him to the attention of a gallery owner, who requested him to create more necklaces in the same design. They were all sold out.

After getting married, the Yurmans launched a New York-based jewelry business together in 1980. Drawing inspiration from art and design, their real intention is not to make business, but to design beautiful jewelry for everyone to wear. The black and white tone is often used in the brand’s image and has become its well-known signature to the present day.

By offering affordable fine jewelry, David Yurman caters for various groups of customer regardless of their purchasing power. For example, its bracelets range from 750 to 3,000 US dollars, depending on the types of gemstones, while maintaining the same standard of material quality. The brand’s most outstanding signature is the use of cables made of small metal wires being intertwined together. Yurman drew inspiration from his childhood experience when he played in the woods and found huge trees encircled with strong intertwined vines. He felt free and in harmony with nature when he swung on them. Therefore, his cable jewelry is an effort to connect the primitive world with the present one.

Telling stories about each piece of jewelry, tracing its origin and historical background and presenting its connection with nature, animals, culture and traditions are all emerging trends, being developed in line with Millennials’ preference for one-of-a-kind products and services. The concept of the “must-have,” which reflects their consumption behavior, underlines the importance of unique product designs for both international and local brands. Designers are assigned the vital role in expressing emotions and conveying concepts through each piece of work with an aim to attract consumers. The following examples will reveal how some of the leading jewelry designers find their ideas and inspirations to fulfill this role.
Hajime Ando

Hajime Ando is a Japanese designer with strong passion for Roman culture and architecture in Italy. He combines Roman art, architecture and street motifs in his jewelry designs. His attention to details leads to meticulous creation of impressive works. Ando graduated with a major in metal craft before a trip to Italy would change his life forever.

Fascinated by the charm of Italian fashion, architecture, design, films and culture, he spent five years learning Italian language in Japan before moving to Valenza, a town of art. He built his expertise in craftsmanship and jewelry design, and then started his career as a jewelry designer for LUCA CARTI. With outstanding progress, he eventually became one of BVLGARI’s seven designers in Rome. His works are a perfect combination of Roman history and modern design.

After 10 years of working with BVLGARI, Hajime Ando is now a design consultant who develops prototypes for startup brands in Europe and Japan. He has also chosen Thailand as a place to find new design inspirations and plans to create a new brand in Thailand, as well as establish international reputation of “Made in Thailand” products.

Hajime Ando’s advice to those who are interested in becoming jewelry designers is that you should pay attention to everything you encounter, immerse yourself in gem and jewelry trade for thorough understanding of this business and learn from the experts. By this way, opportunities will arise.

Nisan Ongwuthitham

Nisan Ongwuthitham is the founder and owner of Ong Jewelry Design, or NISAN ONG, a Thai brand that receives worldwide recognition. His passion as an art collector of paintings, sculptures, gem and jewelry, as well as his love of design and the need to see its result as concrete objects, have eventually brought him to the world of gem and jewelry. His designs are inspired by important events, symbols, faith and belief in Thai culture, as well as nature, especially wild animals and flowers, which can often be found in his works as the symbols of yin and yang.

He started his business by opening a simple jewelry shop in a department store. One day, his friend in Tanzania sent him a rough bluish-violet tanzanite which inspired him to
create his own work. It was the turning point of his life, and tanzanite would be one of the materials which help him to become famous in the world of fine jewelry.

While his company enjoys strong demand from around the world, Ongwuthitam is aware of a decline in the European market and is now shifting his focus towards Asia, especially China, Hong Kong, Taiwan, Indonesia, Singapore and Thailand, where his brand has a substantial customer base. Meanwhile, the company is still waiting for feedbacks from customers in the Middle East before continuing its expansion. Every piece of jewelry by Ongwuthitam is exquisitely made by hands as a personalized product, with an average price of 5,000-10,000 US dollars per piece.

According to an interview by JNA magazine, Ongwuthitam sent his words to those who are interested in entering gem and jewelry industry that what he does is not only about making business; it is his lifelong passion. This career philosophy influences every piece of jewelry he has ever created. You can be lost if you look only at the business side. His jewelry is not made for money but created from his love and devotion to each piece by choosing to follow his instinct rather than fashion trends.

Design is not only about creating concrete objects out of abstract concepts and inspirations, but also the most effective factor in adding value to products. Even though pricing competition is getting more intense, leading gem and jewelry brands still refuse to take part in this price war. Instead, they offer new product designs to attract new customers and maintain old customers’ loyalty. This is a better way in comparison with the tactic of price reduction which cannot add value to products and also undermine the long-term interest in gem and jewelry.

References
7) http://www.nisanong.com
8) Thai jeweller offers a fresh twist on classic designs. Retrieved December 11, 2019 from https://www.jewellerynet.com
Financial fluctuations and political unrests in several countries continuing into 2020 have undermined the economic system and consumers’ confidence. Under this changing situation, businesses have to adapt and cope with the threat of being disrupted by competitors, innovations, technology or even consumers’ changing behavior. With this in mind, marketers around the world are now focusing on the consumption pattern of consumers in each generation, especially the Millennials and Generation Z.

How to Define Generations

The US-based Pew Research Center has defined Baby Boomers as those who were born between 1946 and 1964, Generation X as those born between 1965 and 1980, the Millennials or Generation Y as those born between 1981 and 1996, and Generation Z as those born between 1997 and 2012. According to Worldometers, the world population is now 7,794 million; 50.4% are men and 49.6% are women. People aged 25-54 years old, which include both the Millennials and Gen X, account for the largest share of the population at 40.59%. Being in the working age, they purchase more than other age groups. Meanwhile, the United Nations indicates that in 2020 Gen Z will have the highest share of the population at 32%, surpassing Millennials at 31.5%. Therefore, understanding behaviors of these two generations, which are the biggest group of consumers, is what every business should not overlook.

World Population in 2020

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Males</th>
<th>Percent</th>
<th>Females</th>
<th>Percent</th>
<th>Age Group Population</th>
<th>Age Group’s Share of Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>1,023,857,619</td>
<td>51.61%</td>
<td>959,791,007</td>
<td>48.39%</td>
<td>1,983,648,626</td>
<td>25.45%</td>
</tr>
<tr>
<td>15-24</td>
<td>624,928,997</td>
<td>51.66%</td>
<td>584,654,661</td>
<td>48.34%</td>
<td>1,209,583,658</td>
<td>15.52%</td>
</tr>
<tr>
<td>25-54</td>
<td>1,604,975,664</td>
<td>50.73%</td>
<td>1,558,993,708</td>
<td>49.27%</td>
<td>3,163,969,372</td>
<td>40.59%</td>
</tr>
<tr>
<td>55-64</td>
<td>349,395,662</td>
<td>49.21%</td>
<td>360,595,066</td>
<td>50.79%</td>
<td>709,990,728</td>
<td>9.11%</td>
</tr>
<tr>
<td>65+</td>
<td>326,816,011</td>
<td>44.92%</td>
<td>400,790,334</td>
<td>55.08%</td>
<td>727,606,345</td>
<td>9.33%</td>
</tr>
</tbody>
</table>

SOURCE: HTTPS://WWW.WORLDOMETERS.INFO
Baby Boomers are those who were born in peaceful time after the end of the Second World War, when all countries needed restoration after losing a large number of populations. People in this period tend to have a lot of children to help increasing labor force for country development. The Baby Boomers or Gen B can be characterized as having serious attitudes, following traditions, devoting themselves to work, and being patient and economical. All in all, they are often categorized as “conservatives”.

Generation X was born in the age of prosperity and has lived comfortable lives in comparison with previous generations. They grew up with the development of video games and computer. The birth rate control began at this time after a rapid increase of population during the birth of Baby Boomers, which resulted in resource insufficiency. Distinctive traits of people in this generation are their preference of everything simple and casual, the concept of work and family balance, the do-it-yourself and independent spirit, as well as uniqueness and out-of-the-box creativity. Different from Baby Boomers, they do not strictly follow traditions and are well adapted to changing culture.

Generation Y or the Millennials grew up in time of economic growth and received good educational opportunity. Gen Y children are often spoiled so they insist on getting what they want and have their own unique way of thinking. They will only do what they have passion for and refuse what they are not interested in. They are the first generation that learned to use social media as the main tool for daily communication since they were students. They consider social media both as a personal space and a platform to connect with foreign culture. Millennials are heavily influenced by their friends and always fear of missing out. They follow social media posts by their friends and online influencers more closely than other generations. Three out of four reveal that they purchased products after seeing serious attitudes, following traditions, devoting themselves to work, and being patient and economical. All in all, they are often categorized as “conservatives”.

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According to the graph, Asia has the largest population at 59.5%, followed by Africa at 17.2% and Europe at 9.6%. Among Asian countries, China and India have the largest population at 18.47% and 17.70% of the world’s population respectively. They are also the top two countries with the highest number of Millennials in the world.
them in friends’ and influencers’ posts on Instagram.

Additionally, Gen Ys are highly competent in communication and IT-related work. They are capable of multitasking and thinking creatively.

Generation Z is becoming the biggest group of the world’s population. They grew up with all kinds of conveniences. Since both of their parents work outside the home, they mainly learn about living in society through online channels. A research found that 44% of Gen Zs check social media on an hourly basis to read the news, enjoy entertainment, and communicate with others. They value independence, freedom and privacy more than previous generations. They also spend most of their time on YouTube, and 95% admit that they cannot live without smartphones. Gen Zs use social media to entertain and be entertained while Millennials use them to share information.

Gen Zs often make quick decisions and do not like waiting. They are open to diverse thoughts and culture that they discover through the digital world. They would learn from graphs, infographics, statistics, or short and easy-to-understand information rather than long texts. Having little patience, they frequently change their jobs.

According to Bain & Company’s latest report, the luxury market was worth 1,400 billion US dollars in 2019, growing by 4% despite unfavorable situation. Online channels and secondhand markets are main supporting factors, as well as revised business models, branding development and value-oriented offerings that cater to teenage customers. Chinese customers grew at the rate of over 90%, with luxury products consumption accounting for 35% of the total value in this market. Among luxury products, jewelry and shoes were the top two categories with an equal growth rate of 9%.

Millennials accounted for 35% of consumption in the luxury market, and their share is expected to increase into 45% by 2025. On the other hand, Gen Z is expected to account for 40% of the luxury market by 2035, with more ready-to-purchase attitude compared to other generations and consistent growth especially in Asia. Gen Zs consider themselves as creative people and regularly communicate with luxury brands, which they will return to if the brands show truthfulness and can emotionally engage with them.

Over 80% of luxury customers, especially the Millennials, prefer brands that are socially responsible while 60% believe that luxury brands should engage in social issues even more than other industries.

The secondhand luxury market is worth 29 billion US dollars and is another way for luxury brands to reach new targets and enlarge their customer base. Therefore, luxury brands should develop strategies to capitalize on this opportunity in drawing new customers instead of considering it as a threat.

China Millennials are playing an important role in China’s and the world’s gem and jewelry market due to the growing middle class and booming economy. They purchase jewelry to show their unique identity unlike previous generations who buy jewelry as an investment. With over 400 million of Millennials or more than 25% of the population, China is a large market with high purchasing power. According to De Beers, 68% of diamond sales in China come from Millennials. However, only 4% of millennial customers buy gold jewelry online; most of them use online channels to search for information before purchasing products at physical shops. Apart from revealing the wearer’s identity, jewelry can also pass stories from the glorious past on to these new-generation customers.
India is another country where the number of Millennials is rapidly increasing. In 2019, China was the country with the world’s largest population at 1.43 billion people, followed by India at 1.37 billion, accounting for 19% and 18% of the world population respectively. However, the United Nations has estimated that India’s population will surpass China’s in the next eight years, making India the country with the largest population. A report from the Organization Development and Learning Partner also reveals that Indian Millennials account for 50% of the country’s labor force in 2020 and the share is expected to increase to 75% in 2025. According to the American Express, 37% of its cardholders are Millennials, and their spending is rapidly growing; 42% of them spend their money on luxury dining, 38% on luxury products, and 35% on high-end apparel. Their spending on fine jewelry is growing by over 43%. Gold jewelry is still popular among Millennials just like other generations, but they are specifically interested in new designs for daily wearing.

The Millennial is the main driver of Indian economy. Their familiarity with online channels supports the growth of e-commerce through smartphones. They are also an important part of the growing middle class in India.

### Indian Millennials Work Force

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>75%</td>
<td></td>
</tr>
</tbody>
</table>

### Millennial Cardholders

- **37%**
  - Luxury dining: 42%
  - Luxury products: 38%
  - High-end apparel: 35%
  - Fine jewelry: 43%

### Indian Millennials Work Force

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>75%</td>
<td></td>
</tr>
</tbody>
</table>

### Reaching Digital Generations with Social Media

Social media is an online channel being increasingly popular among various generations and has become a new way to reach customers in place of offline channels and traditional marketing tools. As seen in the table below, Millennials mainly use YouTube, Facebook and Instagram at the rates of 88%, 83% and 67% respectively, while Gen Zs tend to use YouTube, Facebook and Instagram, at the rates of 89%, 77% and 74% respectively.

The popularity of online applications among each generation in 2019 is shown below.

<table>
<thead>
<tr>
<th></th>
<th>Facebook</th>
<th>Instagram</th>
<th>Twitter</th>
<th>WhatsApp</th>
<th>Youtube</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby Boomers</td>
<td>69%</td>
<td>28%</td>
<td>27%</td>
<td>40%</td>
<td>73%</td>
</tr>
<tr>
<td>Gen X</td>
<td>77%</td>
<td>45%</td>
<td>38%</td>
<td>55%</td>
<td>84%</td>
</tr>
<tr>
<td>Millennials</td>
<td>83%</td>
<td>67%</td>
<td>49%</td>
<td>66%</td>
<td>88%</td>
</tr>
<tr>
<td>Gen Z</td>
<td>77%</td>
<td>74%</td>
<td>48%</td>
<td>65%</td>
<td>89%</td>
</tr>
</tbody>
</table>

SOURCE: HTTPS://WWW.VISUALCAPITALIST.COM

**The Millennial and Gen Z are the two largest groups of people in the world today. Both generations can be considered as digital generations as they are savvy internet users who can do research, enjoy entertainment and even build their career online. To penetrate this market, both online and offline marketing is required so that you can develop and broaden your customer base to maintain business growth in the face of economic fluctuations.**
Diamond: Treasured Gemstone

What is Diamond?

The word “diamond” is derived from the Greek word, “adamas,” which means “incomparable”. The key characteristics which make diamonds so precious and highly priced are beauty, durability and rarity. With their hardness of 10 Mohs scale, they are the hardest gemstone. Carbon is the primary element of diamonds. Diamonds come in diversified colors, varying from colorless, yellow, brown, green, pink, orange, red, blue and black. However, most of the diamonds sold range from colorless or pure white, light yellow to brownish yellow.

Source of Diamond

1. Russia ranks as the world largest diamond producer of the world. There are small and large diamond mines located in many cities. The country’s largest diamond mine is Aikhal in Sakha. The mine produced 12 million carats of diamonds in 2018 and has an estimated reserve of 175.56 million carats.

2. Botswana is the world’s second biggest diamond producer. Orapa is the country’s largest and oldest diamond mine, which is located 240 kilometers west of Francistown. It was estimated that the mine may contain around 131.2 million carats of diamonds. Jwaneng, is another large mine, which is located about 257 kilometers southwest of Gaborone. It was estimated that the mine’s reserves could be around 166.6 million carats.

3. Canada is the world’s third largest diamond producer. There are many diamond mines located in various states. Major diamond mines include Diavik, Ekati and Gahcho Kué in Northwest Territories. Ekati is the first surface and underground mine of the country. It is one of the world’s large mine, producing diamonds around 7.5 million carats annually.

4. DR Congo is the world’s fourth largest diamond producer in 2018. The country produced 16.4 million carats of diamonds. Its prominent diamond mine is Miniere de Bakwange (MIBA) in Kasai-Oriental. The mine is a joint venture of the government (80%) and Mwana Africa Plc. (20%).

5. South Africa is the world’s notable diamond source with many diamond mines in many cities. The largest mine of the country is Venetia located 80 kilometers from Limpopo. The mine holds an estimated diamond reserves of 92.4 million carats.

6. Angola has 3 mines. Catoca is the country’s largest mine, which is located near Saurimo, 840 kilometers east of Luanda. The mine has produced a total of 7.65 million carats diamonds.

7. Namibia is one of the world’s sources of superior quality diamonds. Most of the country’s diamond deposits are located on its territorial waters. The deposits were estimated to hold around 80 million carats of diamonds.

8. Australia is one of the world’s eminent diamond producers. Argyle mine is the country’s largest diamond mine, which supplies around 90% of the world’s pink diamonds. However, due to its depleting production, Rio Tinto, the mine’s owner, has planned to cease its operations by the end of 2020. Australia will have only one diamond mine left in operation that is Merlin Diamond Mine in Northern Territory, which yields high volume of diamonds.

Purchasing a Diamond

CLARITY

The amount of inclusions inside a diamond can be examined with naked eyes and a 10x magnifying glass. A diamond with the best clarity is a diamond without any inclusions. According to basic clarity grading, if an inclusion is visible with naked eyes, it will be graded as an imperfect diamond.

COLOR

According to international standards, diamond colors are classified from colorless to yellow with a color grade starting from D, E, F to Z. In Thailand, diamond’s color also commercially refers to as “nam,” ranging from 100, 99, 98, etc. While nam 100 diamonds are rare and highly priced, diamonds of I color or nam 94 and below are popular on the market. Grading color of a diamond mounted on a setting will meddle the color of the diamond to appear lighter or darker than its actual color.

CUT

There are diversified cutting styles, for instance, round, oval and marquise. However, round brilliant cut diamonds are the most popular. A diamond with good cutting demonstrates fine proportions, which deliver great brilliancy.

CARAT WEIGHT

Diamonds are priced according to their weight in carat. One carat equals 0.20 grams or 100 points. In general, diamonds weighing less than 1 carat, though of good quality, are not too costly. However, diamonds of 1 carat and more may fetch average or high prices depending on their quality.

Caring and Cleaning a Diamond

STORAGE

Due to diamond’s harness, diamond jewelry pieces should not be stored with other gemstone jewelry pieces to prevent scratches. Loose diamonds should be kept in a pouch individually as they can scratch each other.

CLEANING

Soak a diamond in warm water mixed with a little soap water and a tablespoon of ammonia, then polish it with a soft bristle brush before wiping it dry. Afterward, rinse it again with warm water and wipe it dry. Finally, wash the diamond in rubbing alcohol to get rid of soap and wipe it with a soft cloth.

WEARING

Avoid smashing or scratching a diamond with sharp objects. Despite being the hardest substance, it is brittle. In addition, do not hit a diamond’s girdle as it may cause the diamond to break or chip. Also, hydrocarbon compounds from smoke, fats and food ingredients, as well as vapor from chemical substances or solutions may coat a diamond’s surface and diminish its brilliancy, so prevent wearing diamond jewelry while cooking, cleaning, or doing hard work.
What’s Happening

**China and the UAE Form Strategic Alliance**

Dubai Multi Commodities Centre (DMCC) has signed a memorandum of understanding to establish strategic alliance with China Gems and Jade Exchange, the official platform for gemstone and jade trading in China. This cooperation aims to create new trading opportunities between the United Arab Emirates (UAE) and China by connecting buyers and sellers of gemstones and jade from both countries, as well as promoting their businesses. The signing of this MoU underlines DMCC’s support of the UAE’s wider economic vision, especially the ‘Dubai Silk Road’ strategy as appeared in the ‘Fifty-Year Charter,’ which was announced by Sheikh Mohammed bin Rashid Al Maktoum, vice president and prime minister of the UAE and the ruler of Dubai. It also reflects Dubai’s important role as a strategic location in the Belt and Road Initiative to form international strategic alliances.

**The US to Suspend GSP for Thai Jewelry on April 25, 2020**

US President Donald Trump announced a suspension of Thailand’s benefits under the Generalized System of Preferences (GSP) for certain categories of import products, claiming that Thailand fails to protect labor rights according to the international standard. The suspension will come into effect on April 25, 2020, affecting 22 items of Thai jewelry under HS-Code 7113, articles of jewelry; HS-Code 7114, articles of goldsmiths’ or silversmiths’ wares; HS-Code 7116, articles of natural or cultured pearls, precious or semi-precious stones; and HS-Code 7117, imitation jewelry.

**WCO Assigns New HS-Codes for Synthetic Diamonds**

World Customs Organization (WCO) assigned new six-digit codes for lab-grown diamonds or synthetic diamonds under Chapter 71, gem and jewelry products; Heading 7104, synthetic stones. The new codes are 7104.21 for synthetic diamond, unworked or simply sawn or roughly shaped (i.e. rough synthetic diamond), and 7104.91 for synthetic diamond, otherwise worked (i.e. polished synthetic diamond). As a result, rough and polished synthetic diamonds now have their own codes separated from rough and polished synthetic color stones under the synthetic stone category. The new HS-codes will become effective in 2022, in a revised HS edition which will replace the current one from 2017.
Classic Blue: The Color of 2020

Pantone, the US-based organization for color standardization and color trend analysis, has announced that its 2020 Color of the Year is Classic Blue (19-4052). This dark blue shade reflects timelessness, luxury and elegance, with a sense of peace and tranquility. Pantone believes that the color exudes confidence which can benefit everyone in this new age of technology. For gem and jewelry industry, a large variety of blue gemstones can be used in jewelry design, including blue sapphire, lapis lazuli, tanzanite, etc.

Alrosa joins Everledger and Tencent in the launching of WeChat Mini

Alrosa, Everledger and Tencent just launched a new e-commerce solution called WeChat Mini program for retailers in China, which is the world’s second largest diamond consumer. This solution will demonstrate the power of blockchain technology to enable transparent diamond trading with a full disclosure of its origin and history from the mine to the customer. WeChat Mini program will bring transparent and secure diamond information at the fingertips of a billion WeChat users. It is also the first product under the collaboration between Everledger and the new investor Tencent, creator of WeChat, which is one of the world’s largest social media and e-commerce platforms.

India’s Gold Jewelry Hallmarking to be Mandatory from 2021

India has announced mandatory hallmarking of gold jewelry in various fineness values, especially 14K, 18K and 22K. Organized by the Bureau of Indian Standards (BIS), India’s hallmarking system is a certification of gold quality and purity and has been operating for voluntary jewelers since January 1, 2017. There are four different marks in gold hallmarking: BIS Standard Mark, Purity in Karat and Fineness, the Assaying Centre’s Identification Mark and the Jeweller’s Identification Mark. A notification will be issued for all jewelers to register for gold hallmarking starting from January 15, 2020 at the Bureau of Indian Standards, and the rule will come into effect on January 15, 2021.