4th IR and challenges for the creative and cottage industries

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Abstract. According to the Future of Jobs Report 2016, creativity will become one of the top three skills workers will need. With the avalanche of new products, new technologies and new ways of working, workers are going to have to become more creative in order to benefit from these changes. The global impact of 4th IR had already affected various industries, such as travel and hospitality, retail, media and the entertainment businesses, customer package goods and many others. In most countries in Asian region, government policies had been written to prepare their nation in facing the impact of the 4th IR. Most countries had plans to become the producer of high-value, diverse and complex products. So, what will happen to the small cottage industries which are run by small families through generations? Some are totally isolated from the mainstream technology and left out from the development radar. In this paper, the researcher shares a case study of an urban batik entrepreneur and some tips in preparing ourselves for the 4th IR.

Keywords: 4th Industrial revolution, creative industry, heritage

1. Introduction
The fourth industrial revolution or 4th IR is the era of busting technology that touches almost everyone’s’ life. Robotics, nano technology, internet of things, biotechnology and artificial intelligence or AI are some of the few examples on areas that are marked by this emerging breakthrough that will benefit millions of people. It had also created young billionaires like Mark Zukerberg (FB), Brian Jospeh Chesky (Airbnb) and Anthony Tan (Grab). A creative way of selling product by having a service without inventory has becoming a lucrative business model. However, in this new upcoming era, the success of one’s business may likely kill the others. It is becoming a painful ‘battle’ between disruption and opportunity; being optimistic is not an option since the only way to survive is to adapt with the rapid changes.

In the South East Asian (SEA) region, 90% of its population still earns below the international poverty line, depending on small business to meet their end [1]. What will happen to us in the SEA region when the impact of 4th IR becomes greater? How bad are we impacted by the 4th IR? According to The World Economic Forum, 3,200,000 people in SEA will lose their job, more than any other countries in the world [2]. Therefore, having a secured job can be a thing of the past. Discovering a self-creating prospect is vital for the near future. The chances of the younger generation migrating their field from what they had learned will be a common thing; therefore, continuous learning process is not an option. Greater skill is needed to survive the future and one must not work in alone. They need to be connected to the world in order to survive this revolutionary era. The question is, how do we cope with this challenging future? What will happen to the local craftsmen? How are
they able to cope with the multi-skilled demands whereby most of us only depend to the one skill that we know best?

According to the World Economic Forum, the creative industry will be in the 3rd ranking job sought for in 2020 [3]. Researchers also found that creative industries welcome people from all ages and backgrounds. It provides a significant contribution to youth employment and careers. The creative industry that relates to this statistic mainly attached to modern technology such as architecture and engineering, computer related industries and artificial intelligence. As we can see in the list of declining sectors, that also include art and design as well as other areas such as sports and media, entertainment and travel. Most of the jobs that are previously made or think by human are eventually replaced by machines, thus making ourselves relevant is currently a challenge. Having a machine to produce crafts is highly possible or had been done by now, so what is the hope left for the cottage industries?

According to Zhang Dawei, the general manager of the Beijing Culture Equity Exchange, “Heritage items seem to have less connection with modern life, they remain a cultural symbol that can survive generations and must have their own value. We need to dig out the market value of cultural heritage items, turn them into products and make them market hits; cultivating demand is the best way to preserve (the heritage),” Error! Reference source not found.

According to Maznah she wrote that ‘craft as culture’ may embrace the artefact for quite some time[5]. For instance in Bali, the cultural objects are still relevant since it is being used in their daily life, thanks to its devoted society. Therefore, the artefact produced by the community will remain significant and valuable to the community; unless they stop practicing what they are doing in the future.

Same goes to other artefacts found in the Chinese culture. The artefacts may change its appearance to cope with current taste but as long as it is supported by a culture or religion, it will stay relevant in that particular society. The safeguard of such heritage relies on the fact that the culture has strong support from its society, who values them from the past generations and hand it down to the next generation.

The second assumption from Maznah stating that ‘craft as industry’ is the main agenda in the near future, which is also supported by Zhang Dawei on his idea of ‘cultivating demand’. How do we create demand for a dying craft? The answer is through constant improvement on current products, plus re-invented it in other forms so that it can stay relevant in many ways. Maznah Mohamad also wrote: ‘Small scale industry revealed that, small scale manufacturing and handicrafts may fit into the framework of modern capitalism, in multiplicity way. Capitalism’s ongoing unfolding continues to create spaces, however exploitative for various kinds of small scale production to be created, maintained perhaps destroyed and then reinvented’ [5]. Therefore reinventing an artefact seems significant and relevant, which led the researcher to share a case study done by a young batik entrepreneur in Penambang Kelantan.

A case study on Ruzz Gahara Batik in Kelantan

The earliest batik recorded in the modern Malaysia was in Penambang somewhere in the 19th century (1800s), which was in the form of batik pelangi (made from tie and dye technique). In 1914, batik using wax was introduced by the Javanese and widely spread in the east coast of Peninsula Malaysia. The production time is faster compared to batik pelangi techniques, which required more time to tie each individual pattern repeatedly before dipping it in colors. Stencil technique was later being introduced in 1928 which make the production of batik faster and larger in scale. Today, batik on silk is produced in Kelantan and Terengganu but the number has decreased rapidly. Contributing factors are largely due to expensive imported raw materials from China; lack of skilled workers to join the batik industry, regardless of numerous institutions producing younger batik apprentices yearly.

In 2014, Kelantan was hit by the worst flood in Malaysian history, resulting to more closures of batik workshops situated along the riverbanks. Now, the only few left are mainly from a larger scale of batik workshop owners. Ruzz Gahara started its business in 2007. The owner, Mr Nik Mohd Faiz
bin Nik Amin is the grandson of a batik producer, planned to continue his grandfather’s batik legacy, even though he studied architecture. Since he has a strong architecture background, he started to do a lot of research on the Malay traditional houses. He discovered many historical facts that linked the Kelantan artefacts to local history, dated from 1st to the 8th century. Therefore, he got an idea on narrating this history through his masterpieces on batik. By doing his research, he discovered an old carved motif called ‘ketam guri’, a flower that was also found on the tomb of the legendary Kelantan’s princess. The same motif was also said to be on the princess’s hairpin that was used to kill her husband who had remarried when she was away in Siam (Thailand). Therefore, Mr Faiz had applied the motif of ‘ketam guri’ onto the batik stamp (sarang) and used it as main pattern for his collection.

Figure 1. The motif of ‘ketam guri’ in drawing [9]

Figure 2. The motif of ‘ketam guri’ on batik stamp.

Figure 3. The motif of ‘ketam guri’ applied on batik

In Kelantan, copying other’s design is very much a common scenario especially on the motifs and color. However, having the motif on iron stamp is making it hard to copy; therefore, he has secured an exclusive motif and creating a trademark in his designs. He uses dull shades to represent the miserable battle between the Malays and the Siamese during that period. This is an example of how values are added onto a dying craft, in this case in Kelantan. Adding values to an artwork does not only apply to its physical looks but also to the content, so that the whole product becomes more appreciated. His continuous research on local history is not just through textbooks but also through visits on historical sites that brought his team to Pattani. That is how important history can impact one’s design.

In strategizing the products range, Mr Nik set a high price for his ‘historical’ collections in order to create a niche market, catering for upscale clients who can afford and appreciate the value of his line. In adding varieties to his collections, he created a line that breaks the monotony of batik that commonly used as uniforms in government sectors. Therefore, he came out with different collection, such as leisurewear, casual smart and resort wear, which are very appealing to a larger group of buyers which do limits the market only to government servants as before. Therefore, he opened a boutique in a prime location in Kuala Lumpur and also in Isetan KL to cater for bigger audience. At the moment, his strategy works and he is currently quite well known in the local fashion scene.

Mr Nik also understands the use of technology, therefore he also uses internet to sell his collection online reaching the overseas market. To date, he had managed to sell his product to many countries including the USA, UK and Japan. He had proved that, in order to sustain a backyard industry, a craft should be appreciated by their own society, which later can be turned into business or vice versa. If both can be combined successfully, the product has greater chance to stay relevant in the market.
Figure 4. The traditional style of wearing batik sarung with local top (baju kurung).

Figure 5. The innovation made into the styling of batik in Ruzz Gahara men’s wear.

Figure 6. The innovation had been made through styling of batik in Ruzz Gahara’s collection for their women’s wear.

Collaborating the process with technology

Early this year, Mr Nik lost her master craftsman who was specialized in the batik stamping process. He said finding a replacement is very hard since the process of stamping requires specific skill to master. The pressing needs to be on exact pressure or else the wax will not be equally distributed and the lines will break. The stamp is heavy (almost 2kg) and stamping of a two meter fabric needs more than 100 times of stamping. Since the technique is manually done, the production process is very slow. The tiring process and low pay do not attract the youngsters, therefore finding a replacement is difficult in Kelantan. Therefore Mr Nik seek advice from public universities through his collaboration with the Public-Private Research Network (PPRN) grant scheme under the Ministry of Education Malaysia that fund researchers from local universities that solve industry-related problems. He later got the grant with Universiti Malaysia Kelantan (UMK) to seek solution for making the stamping process easier. Therefore, a mechanism was invented by UMK’s lecturers to support the weight of the stamp that makes the process of making batik easier and faster.

Overcoming the 4th IR Challenges: Some Tips

Not many amongst these small scale cottage industries are fortunate enough like Ruzz Gahara. Many of the cottage industries have to close business due to lack of reserve and unable to maintain the overhead. Some merged into bigger companies or supply to a bigger player in the market. The assumption of ‘craft as an industry’ seems like a more challenging option to opt for, but for those who are already in the business, giving up is not the solution. Hence, here is a few tips on how to face the ordeal, or at least prepare ourselves for the future as suggested in many articles related to the 4th IR issues.

1. Education

In this era of technology, we don’t have limitation to information. Formal classroom education will eventually be a thing of the past. Therefore, it is common to get a degree in one area but doing something totally different at the end. We must prepare to learn and re-learn since current knowledge becoming obsolete faster than ever before. Relying on just one specialisation is not a smart move for surviving the future, thus continuous learning is very much needed. If we are in a creative business, we must also learn to adapt with the changing market trends, the system, networking, the technology and the production. Therefore we must equip ourselves with relevant knowledge to help us survive in the business.

Non-formal education is also important to embed appreciation towards our own culture. If we cannot appreciate what we have today, it will be obsolete in the near future. Thus, teaching our children to appreciate their own culture is important. The technology today allows them to choose any
culture that they may favour thus if we do not make our culture interesting enough, it will be left out sooner than we think. We can promote our culture or heritage in many ways through technology since the younger generation make full use of it. Portraying our culture can be in many forms, such as games, documentary or any other form of digital media that will attract the younger generation.

ii) Innovation

The World economic forum in 2018 also suggested ways to counter the challenges of 4th IR through adopting innovative technologies at scale, whereby infrastructure and urban companies must effectively implement new approaches to innovation and integrate new technologies into existing workflows [5]. Therefore, innovation should take place from all levels, starting from the ideation stage, the processes, up until the end product.

iii) Trans-disciplinary collaboration

If one does not have the capacity of doing everything by themselves, then consider to have a collaboration partner(s). The collaboration can come from either the industry players or any educational institution. Smart partnership is vital to survive the upcoming future. Consequently, the old and the new generation have to work together to face the 4th IR challenges. Specific discipline of knowledge is needed to survive the hardship, but eventually we might need to work with other areas in order to grow. If we do not have the expertise, collaborate with the one who has them. For instance, technology can be used as a tool to revive a dying craft but without having the local artisans to refer to, they will end up producing poor quality of crafts in terms of appearance or content. Therefore, a smart collaboration is important to move the relevant cottage industries to ensure its existence in the future.

iv) Understanding demand

A good product should sell; in order to make it marketable, one must understands the need and demand from their targeted buyers. Improving current products or services can lead to a fruitful business. A product should also carry values in terms of quality with appropriate pricing so that it can stay competitive in the market. One should also be sensitive of feedbacks and constantly improving one’s products. As mentioned in the WEF (2018) report:

‘To identify new products and services to sell and segments in which to compete, they should increase the study of market developments, improve flexibility and hedge risks by maintaining a balanced portfolio.’ [5]

v) Quick Respond

In the near future, opportunity is about how quick we can respond to a problem. In creative way of thinking, a person has to act quickly and grab any opportunity that comes along. We are constantly pushed to make better products with a shorter length of time. Flexibility to change will help us face the uncertainty of the future, thus the process of thinking, acting and producing should be faster to cater the ever-demanding market. The ability to adapt changes and switching business to a more profitable industry will be a common thing in the future. Holding back on something based on sentimental sentiments will lead us nowhere unless we adapt to change in order to remain relevant. Therefore, if one had to face the mainstream world of revolution, the ability to act quickly and adjusting to new scenario is the key to survive the 4th IR.

Summary

Klaus Schwab (2016) wrote:

‘Neither technology nor the disruption that comes with it is an exogenous force over which humans have no control. All of us are responsible for guiding its evolution, in the decisions we make on a daily basis as citizens, consumers, and investors. We should thus grasp the opportunity and power we have
to shape the Fourth Industrial Revolution and direct it toward a future that reflects our common objectives and values' [7].

Therefore, the era of 4th IR is an era of disruptions and opportunity that comes as a package. Cottage industry should not be marginalised in this challenging time, but it should adapt changes in staying relevant. Therefore, continuous R&D in relevant industry or institution should be done on local crafts product to enhance the quality of material and its appearance. Creativity must be applied at all levels, from planning up to the production stage to ensure success in sustaining the cottage industry-based products. Constant process of learning and re-learn are vital to survive the challenging future. The cottage industry players should be backed by technology and society must be taught to appreciate and value them. But when the demand is huge, we should think on ways to supply them massively and do we have the capacity to do so?

Therefore the whole process should be well taught, a proper planning is vital to be successful. The government should also play an important role in valuing their own heritage by having policies that support their existence or growth, therefore adequate funding should be allocated. Heritage-based crafts made by a society should first be appreciated by their own society; therefore educating the society will be a task from various parties. But if the craft product can be appreciated by others outside the society, it will be a bonus for the people and the country.

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