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The Revenue for the New Market
using Innovative Business Model

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Abstract

Objectives – The purpose of this paper is to identify the business growth, customers' request, and revenue resulting from the implementation of the value-driven innovative business model. Tools – Literature review provides a framework for observing the implementation of the innovative business model. It is necessary to identify client requests to address the innovation of a market and observe which one generates more revenue: the new market or the innovative market. Methods – Analyzing the literature review, counting 109 articles, identify the indicators for Ansoff matrix construction. These components are for market development through the new market offering and the diversification of services using digital technologies. Moreover, generating revenue is verifying the assumption that the new market changes the profile of customers who use digital data and accept digital transformation. Results – Restructuring the business by creating new business model, creating and developing the new digital value based on consumer preferences conducting to future revenue, interconnecting products to the new digital technology are the main components behind digital transformations, which can define the new market. Limits – The research is based on an innovative business model in the automotive industry. Thus, future research will be generalized to any activity domain. Conclusions/Originality – This article presents the digital value highlighted in an innovative business model that adopted Industry 5.0 in the new market. On this line, a simple strategy has been built to implement product presentation directions in the new market.

Keywords: business growth, customer, new market, digital value, revenue.

JEL Classification: M21, M41, M31.

1. Introduction

Companies in the automotive industry are increasingly interested in technological innovations involving artificial intelligence (Abrardi et al., 2021), but customers

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are the ones who come to their aid through the demand for new technologies (Ellis et al., 2012).

Increasing customer expectations, a number of environmental factors and competitiveness on the car market are the basis for innovation and companies' revenues (Ili et al., 2010). Thus, the emphasis is on the strategy of developing the market (Li et al., 2021), by creating new markets; in this case it is virtual (Henriques et al., 2020), which have not been explored and for which we do not know the associated risks with the implementation and development costs.

Innovating an existing market is the solution that generates considerable revenue (Sanchez et al., 2010). By changing the structure of an existing market, in which there are already customers (Sanchez et al., 2010; Kjellberg et al., 2015), it will be a certain behavior and with clear requirements for innovation of existing technologies (Yalamov, 2021), but also with the reorganization of the business model (Kjellberg et al., 2015).

Scientific research has shown that virtual reality is an environment for analyzing market innovation at low cost (Henriques, Winkler, 2021). Additionally, the emergence of Industry Revolution 5.0 (I5.0) makes the innovative business model comply with the production process (Xun et al., 2021) based on artificial intelligence or other innovative technologies (Ozdemir, Hekim, 2018).

Flows containing innovative business processes (Sxoinaraki, Panou, 2017), customers and their requirements, revenues, cost generated by production (Pallares et al., 2021) in the automotive industry, market positioning of the finished product (Lei et al., 2014), or investors are components of the innovative business model, which creates digital value in addition to the value of physical goods (Beqiri, 2014).

2. Problem Statement

In I5.0, the emphasis is on value and implicitly on the value resulting from the use of artificial intelligence (AI) (Xun et al., 2021). However, the implementation of I5.0 has a major impact, especially in the automotive industry through innovation ecosystems (Sun, Su, 2015). Therefore, computerization will transform business processes and lead to new customer demands (Roblek et al., 2021).

In this sense, innovation in the I5.0 environment, based on the Internet of Things (IoT), leads to much faster product acquisition (Aslam et al., 2020). In the innovative business model, the supply chain in the production process contains IoT (Akundi et al., 2022).

Inventory management is currently highlighted by developed IT systems that aim to minimize costs and maintain minimum inventory (Singh, Verma, 2018; Conley et al., 2019). However, most of the time, inventory management is done with IoT.

Innovation in a market, compared to a new market, is based on the customer. If in the first case we already have customers (Kjellberg et al., 2015) that we should attract with new products, in their field of interest, in the second case, the customer's request is still unknown (Cleff et al., 2015), for the simple fact that we do not have customers yet.

In a new automotive market, we need a number of factors (Taylor-West et al., 2020) to define the environment for quality assurance of goods, setting market rules, and generating market representations (Harrison, Kjellberg, 2016). They depend on the brand and the group of customers for whom it is intended.

In this context, a new business model is born, based on innovation in the automotive industry. This model is defined by operations to reconfigure the organization of the entity, business processes, computerization of production flow, all stages of accounting, business promotion through successful marketing to virtual clients, highlighting digital value, and preparing accounting statements (Xun et al., 2021; Ozdemir, Hekim, 2018; Fraga-Lamas et al., 2021; Aquilani et al., 2020; Müller, 2019).

Given the above, the innovative business model in relation to the purchasing power of customers requires the analysis of all participating actors (Sxoinaraki, Panou, 2017).

The presentation of a car, in the virtual environment, and its configuration for production remain major challenges for the manufacturer.

The Ansoff matrix identifies the strategy by which a new market is built using technologies, according to the adopted innovative business model.

Both the automotive industry and the marketing of products are experiencing changes in the innovative business model.

3. Aims of the Research

With the implementation of the innovative business model, questions are posed about how we structure the market in order to have advantages. Thus, the questions answered by the research are as follows:

Q1- How do we identify if a new market is suitable for the sale of a car built in an innovative business environment?

Q2- How do we identify revenues in a new market?

4. Research Methods

At this stage of the research, it is important to choose the specialized literature using 82 articles representative of the innovative business model. Initially, articles on economic growth, customer requirements, and revenue identified in the innovative business model were extracted from the Web of Science. However, by studying the articles, it was found that the research needs a number of details about the market, customer requirements, and the digital value created.

Subsequently, there are 27 other articles that support the idea that the strategy of building a new market for an innovative product in the I5.0 environment is based on digital value. This strategy is carried out using the Ansoff matrix.

From the 109 articles, the components for the Ansoff matrix indicators following the analysis of situations in which the product, in this case the car with multiple innovations, can penetrate the market (Yin, 2016). The studies consulted show that a new market is needed (new customers, new locations, new products, etc.) or it can innovate the existing market (old and new customers, new technologies and

techniques to penetrate the market, new or innovative products, etc.) (Kjellberg et al., 2015; Thomas, Maine, 2019).

Research investigates which of the two markets brings the highest revenue to the company and how the product is presented on the market, in relation to customer requirements, by identifying the digital value.

We are proposing to produce a car brand and we still do not know if the innovative market will accept this product (Thomas, Maine, 2019), or if we will have to develop a new market (Kjellberg et al., 2015).

Marketing studies, from the selected articles, are those that show if this product will be sold and if the customer's requirements are met. Moreover, this product will lead to the economic growth of the company (Gusev, 2021) and implicitly to the generation of income if we choose a new market.

The Ansoff matrix, which is a marketing strategy (Gurcaylilar-Yenidogan, Aksoy, 2017), as shown in Table 1, contains the indicators to be implemented (Yin, 2016), presents the steps of developing a new market, but also updating the production process, from an existing product on the market to a new innovative one (Lenfle, Midler, 2009). Existing products on the market are sold in physical stores, showroom type, because the company must remain competitive in the market (Fonseca et al., 2019).

Discounts offered to customers are starting to become less important to them (Lee et al., 2015), and therefore marketing strategies are needed to increase direct sales (Uhlener et al., 2013). However, the new niche can generate sales risks (Hofmann, 2011). Therefore, a reorganization in a sense of the innovative business model is the virtual sales market (Lawson et al., 2015; Fahmi, Alwy, 2020), in which the customers can choose their own options. They can order the car with the desired options and to be manufactured (so the car is not in stock, in the configuration required by the customer) (Karadgi et al., 2009).

The presentation of the cars is made by a robot (Sumpsomboon, Varodhomwathana, 2017), which is much more efficient and actually defines the innovation of the market (Dana et al., 2022). However, the impact of this robot on revenue flow remains constant. Even if this robot takes over human activities, the company's employees observe and verify it.

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However, there are risks associated with the innovative market, such as whether market competitiveness remains the same as before the innovation process (Dana et al., 2022). Customers know how to use information related to innovation (Henriques, Winkler, 2015), which leads to the identification of the resulting value (Exner et al., 2014), even if it is a digital value (Paolucci et al., 2021). The robot collects data and information about customer preferences (Dana et al., 2022), and this is, in fact, a value for the company (Exner et al., 2014) and implicitly an income (Sanchez et al., 2010).

Table 1. Ansoff Matrix

Ansoff Matrix	Current product	New product
	<i>Market penetration</i>	<i>Product development</i>
Current market	Promoting cars that already exist in stock, with attractive financial measures for the customer (discount, credit, etc.); Increasing market share through promotion; Brand sales leader; New physical stores; Extending the variation of products to attract customers.	Creating new prototypes that meet the needs of customers. Superior quality of materials used in the production of cars, at low prices; Innovation of some important functions of the car; New products according to the need and customer profile; Periodic review of the offer to customers.
	<i>Market development</i>	<i>Diversification</i>
New market	Increasing the number of stores to attract new customers; Innovative market; Increasing revenue from dedicated offers.	Special system for direct sales, at low prices; Digitized services; Virtual stores.

Source: Adapted for the automotive industry from Yin, 2016.

Physical store-based infrastructure is maintained, but until the new virtual market develops (Fahmi, Alwy, 2020). Much higher income is obtained than the existing one, or there is a risk that the physical store will have much higher costs than the income and will not be able to support itself financially.

The proposal, in this case, is a new market, which we develop by attracting customers to use innovation (Dana et al., 2022) and implicitly new technologies. In this case, the company will be able to develop new product prototypes (Exner et al., 2014), requested by the customer, following completion of the information in the virtual showroom (Fahmi, Alwy, 2020).

Product diversification would mean selling prototypes developed within the company (Exner et al., 2014; Elverum et al., 2014) or producing them on a large scale, taking into account the options desired by most customers (Dana et al., 2022). Another diversification could be car accessories or even service provided during the warranty period (Paolucci et al., 2021), identified by the created digital value.

5. Findings

The business model depends on the strategy of choosing a product (Oresky, 2019), the correlation of the architecture of the innovative business model with the innovative product (Climent, Haftor, 2021), and the environment for the new or innovative market (Polgári et al., 2017), which will lead to a market strategy (Taylor-West et al., 2020).

An analysis of the literature leads to the identification of the factors underlying the market strategy, through the Ansoff model of the development matrix (Rojek, 2019).

In this regard, we observed from the studied works that this matrix model allows the identification of development needs (Lawson et al., 2016). The architecture of the innovative business model must be flexible and scalable (Akundi et al., 2022), which means that it stimulates the flexible adoption of products in the I5.0 manufacturing environment.

These results suggest that new market models (Polgári et al., 2017) based on Industry 5.0 technology in the automotive industry lead to a business with computerized support (Oresky, 2019) and economic growth, leading for example to higher revenues, than an innovative market. Moreover, the supply chain in the production process is done with IoT (Akundi et al., 2022). In addition, this makes inventory management much easier.

IoT-based innovation in the I5.0 environment leads to much faster products (Aslam et al., 2020), which result in economic growth and thus revenue.

Therefore, this paper contributes to the literature in three ways.

First, the research focused on how to create revenues resulting from the adoption of the innovative business model.

The second way was to choose the type of market. From the specialized literature, we have identified the innovative or new type of sales market. The high price in the new market brings selective customers (see Tesla).

It is necessary to compare the new market with the innovative one. This comparison results from revenue generation, according to Table 2.

The third way was to create digital value in a new market. Even if there are specialized works that show that the innovative market has many more values (Fonseca et al., 2019), more studies of selected articles have shown that the new market is much more advantageous than the innovative one, according to Table 2.

The presentation, in the specialized literature, of the preparation of a new market presupposes the existence of several indicators, depending on the market activities. Search for "New market in automotive industry" on Web of Science returned 1145 results, which were summarized in Table 2.

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A combination of these markets cannot be called into question for several reasons. The marketplace is where the manufacturer and the customers can meet.

First, customers have different preferences, the customer profile is different in the two market models (Taylor-West et al., 2020), and revenues are much higher in a new market (Sanchez, Ricart, 2010), selective from construction, rather than innovation and the loss of customers along the way.

Table 2. Creating revenue in a new market

Source studies	Preparing New market	Stages of implementation of the new market	Resulting digital value	Revenue
(Cleff et al., 2015)	“Methodology for identifying lead markets in the European automotive industry”	New market shape in automotive industry	Structure of a new online market	Revenue from creating a new database with clients
(Stocean, 2018)	„Significant market share and possess key intellectual property, patents and copyrights”	Drives performance	Electronic components of the vehicle	Revenue from the sale of digital materials
(Oresky, 2019)	„Changing the core company functions as are product development, IT, manufacturing, logistics, marketing, sales, and after-sale service”	Reshaping roles in the value creation process	Reconfiguring the departmental structure	Revenue from software sales developed in-house, in the process of creating digital value
(Thomas, Maine, 2019)	„Innovation management frameworks are useful ... giving ...better chances for value creation and capture”.	Tesla Motors – „competing electric vehicle models”	Electric vehicle configured online	Revenue from the sale of vehicles configured by customers in production

Source: Adapted for the automotive industry from source in the first column, resulting digital value to generate revenue.

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Customers in the innovative market (Rojek, 2019) do not fully migrate to the new market, due to financial availability or products. In addition, if these are the requirements of the customer, the question may be asked what the combined markets should look like.

However, there is a lack of description of how the customer is present in the online environment (Cleff et al., 2015), he is presented with a car and can buy it, without interacting with a physical store.

When generating revenue by segmenting the market in relation to customers who have made requests for robotic product presentation, in the innovative or new market, revenue streams automatically recognize costs (Sxoinaraki, Panou, 2017; Fahmi, Alwy, 2020).

6. Conclusions

The structure of the innovative business model identifies the realization of a product that meets the requirements of customers in a new market. This means that the customer's needs and requirements are taken into account when launching a new product. In conclusion, we have the answer to the first question.

Revenues from digital value are highlighted in an innovative business model, which has adopted Industry 5.0, in the new market, and therefore we have the answer to the second question.

The implementation of an innovative business model based on studies in the literature leads to customer research. Thus, the customer's request regarding the evolution of a certain product of the automotive industry (Toni et al., 2021) includes a series of requirements for the implementation of special equipment, in line with the industrial revolution I5.0 and technological progress (Yilmaz, Ustaoglu, 2013). These requirements are both software, by identifying and processing customer data (Cleff et al., 2015), and the car (Toni et al., 2021).

By generating revenue, it is verified that the new market (Polgári et al., 2017) changes the profile of customers (Li et al., 2021) who use digital data and accept the digital transformation of the product.

This paper shows that the new market with conditions imposed by customer demand, the market based on the innovative business model, is the one that generates revenue for companies. The study was conducted only on the basis of scientific articles with an impact on the automotive industry.

References

- [1] Abrardi, L., Cambini, C., Rondi, L. (2021). Artificial intelligence, firms and consumer behavior: A survey, *Journal of Economic Survey*, pp. 1-23.
- [2] Akundi, A., Euresi, D. Luna, S, Ankobiah, W, Lopes, A., Edinbarough, I. (2022). State of Industry 5.0 – Analysis and Identification of Current Research Trends, *MDPI*.
- [3] Aslam, F., Aimin, W., Li, M., Rehman, K.U. (2020). Innovation in the Era of IoT and Industry 5.0: Absolute Innovation Management (AIM) Framework, *MDPI*, 11(2).
- [4] Beqiri, G. (2014). Innovative business models and crisis management, *Elsevier Science Bv*, 9, pp. 361-368.
- [5] Cleff, T., Grimpe, C., Rammer, C. (2015). Identifying Lead Markets in the European Automotive Industry: An Indicator-based Approach, *Industry and Innovation*, 22(6), pp. 496-522.
- [6] Climent, R.C., Haftor, D. (2021). Value creation through the evolution of business model themes. *Journal of Business Research*, 122, pp. 53-361.
- [7] Conley, K., Natarajarathinam, M.L., Rangan, S. (2019). Effect of Accounting Policies on Effectiveness of Inventory Management Strategies, *Engineering Management Journal*, 31(4), pp. 246-256.
- [8] Dana, L.P., Salamzadeh, A., Mortazavi, S., Hadizadeh, M. (2022). Investigating the Impact of International Markets and New Digital Technologies on Business Innovation in Emerging Markets, *Jornal Sustainability*, Vol. 14, 983, pp. 1-15.

- [9] Ellis, S., Henke, J. Kull, T. (2012). The effect of buyer behaviours on preferred customer status and access to supplier technological innovation: An empirical study of supplier perceptions, *Journal Information Industrial Marketing Management*, pp. 1259-1269.
- [10] Elverum, C., Welø, T., Tronvoll, S. (2016). Prototyping in new product development: Strategy considerations, 26th CIRP Design Conference, *Journal Procedia CIRP*, 50, pp. 117-122.
- [11] Exner, K., Lindow, K., Buchholz, C., Stark, R. (2014). Validation of Product-Service Systems – A Prototyping Approach, *Journal Procedia CIRP*, 16, pp. 68-73.
- [12] Fahmi, F., Alwy, M. (2020). Design of Virtual Automotive Showroom with Augmented Reality Technology Using The Smartphone, IOP Conf. Series: *Materials Science and Engineering*.
- [13] Fonseca, L., Fernandes, J., Ramos, S. (2019). Enabling factors for the competitiveness of the Portuguese automotive industry, *Proceedings of the 13th International Conference on Business Excellence 2019*, pp. 1-12.
- [14] Fraga-Lamas, P., Varela-Barbeito, J., Fernandez-Carames, T.M. (2021). Next Generation AutoIdentification and Traceability Technologies for Industry 5.0A Methodology and Practical Use Case for the Shipbuilding industry, *IEEE ACCESS*, 9, pp. 140700-140730.
- [15] Gurcaylilar-Yenidogan, T., Aksoy, S. (2017). Applying Ansoff's growth strategy matrix to innovation classification, *International Journal of Innovation Management*, 22(4), 1850039 (30 pages).
- [16] Gusev, V.B. (2021). Estimation of the Limits of Economic Growth in the Technology Equilibrium Model, *IFAC PapersOnLine*, 54(13), pp. 505-510.
- [17] Harrison, D., Kjellberg, H. (2016). How users shape markets, *Marketing Theory*, 16(4), pp. 445-468.
- [18] Henriques, A.C., Winkler, I. (2021). The Advancement of Virtual Reality in Automotive Market Research: Challenges and Opportunities, *Applied Sciences-Basel*, 11(24), Article Number 11610.
- [19] Hofmann, E. (2011). Natural hedging as a risk prophylaxis and supplier-financing instrument in automotive supply chains, *Supply Chain Management: An International Journal*, 16(2), pp. 128-141.
- [20] Ili, S., Albers, A., Miller, S. (2010). Open innovation in the automotive industry. *R&D Management*, 40(3), pp. 246-255.
- [21] Karadgi, S., Müller, U., Metz, D., Schäfer, W., Grauer, M. (2009). Cost Estimation of Automotive Sheet Metal Components using Knowledge-Based Engineering and Case-Based Reasoning, *Journal IEEE*, pp. 1518-1522.
- [22] Kjellberg, H., Azimont, F., Reid, E. (2015). Market innovation processes: Balancing stability and change, *Industrial Marketing Management*, 44, pp 4-2.
- [23] Lawson, G., Salanitri, D., Waterfield, B. (2016). Future directions for the development of virtual reality within an automotive manufacturer, *Journal Applied Ergonomics*, 53, pp. 323-330.
- [24] Lei, N., Ki, S. (2015). A Decision Support System for market-driven product positioning and design, *Journal Decision Support Systems*, pp. 82-91.
- [25] Lenfle, S., Midler, C. (2009). The launch of innovative product-related services: Lessons from automotive telematics, *Research Policy*, 38, pp. 156-169.

- [26] Li, S., Peng, G., Xing, F., Zhang, X., Zhang, B. (2021). Value co-creation in industrial AI: The interactive role of B2B supplier, customer and technology provider, *Journal of Industrial Marketing Management*, pp. 105-114.
- [27] Müller, J. (2019). Contributions of Industry 4.0 to Quality Management – A SCOR Perspective, *ScienceDirect*, pp. 1236-1241.
- [28] Oresky, M. (2019). How New Technologies in Manufacturing Affect Rivalry, Industry Structure and Marketing Strategy, *Proceedings of 18th international joint conference: central and eastern europe in the changing business environment*, pp. 298-307.
- [29] Ozdemir, V., Hekim, N. (2018). Birth of Industry 5.0: Making Sense of Big Data with Artificial Intelligence, "The Internet of Things" and Next-Generation Technology Policy, *OMICS A Journal of integrative biology*, 22(1), pp. 65-76.
- [30] Pallares, B.S., Rozo, T.A., Camacho, E.C, Guarnizo, J.G., Calderon, J.M. (2021). Design and Construction of a Cost-Oriented Mobile Robot for Domestic Assistance, *Journal Elsevier Science*, 54(13), pp. 293-298.
- [31] Paolucci, E., Pessot, E. Ricci, R. (2021). The interplay between digital transformation and governance mechanisms in supply chains: evidence from the Italian automotive industry, *International Journal of Operations & Production Management*, pp. 1119-1144.
- [32] Polgári, B., Sörös, P., Divényi, D., Sleisz, A. (2017). New Market Roles Changing the Electricity Market Model, *Journal IEEE*.
- [33] Roblek, V., Meško, M., Podbregar, I. (2021). Mapping of the Emergence of Society 5.0: A Bibliometric Analysis, *Organizacija*, 54(4), pp. 293-305.
- [34] Rojek, T. (2019). Analysis of Pro-Market Concept of Business Model. *Marketing and Management of Innovations* (2), pp. 266-281.
- [35] Sanchez, P., Ricart, J. (2010). Business model innovation and sources of value creation in low-income markets, *Journal European Management Review*, pp. 138-154.
- [36] Singh, D., Verma, A. (2018). Inventory Management in Supply Chain, *Materials today-proceedings*, 5(2), pp. 3867-3872.
- [37] Stoean, L. (2018). New performance drives in automotive industry, *Quality-Access to Success*, 19, pp. 530-536.
- [38] Sumpsomboon, S., Varodhomwathana, T. (2017). Robot and plant simulation for automotive part production process design: A case study, *Int j simul model* 16, vol. 4, ISSN 1726-4529, pp. 617-629.
- [39] Sun, B., Su, X. (2015). The Analysis of Innovation Diffusion in Automotive Enterprises Innovation Ecosystem, *International conference on management science & engineering – 22nd annual conference proceedings*, vols I and II, pp. 1581-1586.
- [40] Sxoinaraki, E., Panou, K. (2017). Innovative business models for exploiting green vehicle potential in urban logistics, *World Conference on Transport Research – WCTR 2016*, Volume 25, pp. 954-964.
- [41] Taylor-West, P., Saker, J., Champion, D. (2020). Market segmentation strategies for complex automotive products, *Journal of Strategic Marketing*, 28(3), pp. 266-283.
- [42] Thomas, V.J., Maine, E. (2019). Market entry strategies for electric vehicle start-ups in the automotive industry - Lessons from Tesla Motors, *Journal of Cleaner Production*, 235, pp. 653-663.

- [43] Toni, M., Renzi, M.F., Pasca, M.G., Mugion, R.G., di Pietro, L., Ungaro, V. (2021). Industry 4.0 an empirical analysis of users' intention in the automotive sector, *International journal of quality and service sciences*, 13(4), pp. 563-584.
- [44] Uhlaner, L., van Stel, A., Duplat, V., Zhou, H. (2013). Disentangling the effects of organizational capabilities, innovation and firm size on SME sales growth, *Small Bus Econ*, Vol. 41, pp. 581-607.
- [45] Xun, X., Yuqian, L., Vogel-Heuser, B., and Wang, L. (2021). "Industry 4.0 and Industry 5.0-Inception, conception and perception", *Journal of Manufacturing Systems*, 61, pp. 530-535.
- [46] Yalamov, T. (2021). Innovation in companies at a time of crisis: the role of R&D units and employment of academic researchers in business?, *Journal Elsevier Science*, 54(13), pp. 402-407.
- [47] Yilmaz, S., Ustaoglu, M. (2013). Electric Vehicles Production in Turkish Automotive Industry and Sectoral PEST Analisis, *Second International Conference on Leadership, Technology and Innovation Management (2012)*, 75, pp. 10-17.
- [48] Yin, N. (2016). Application of AHP – Ansoff Matrix Analysis in Business Diversification: The case of Evergrande Group, *International Conference on Electronic, Information and Computer Engineering*, 44.