THE EFFECTS OF ENTREPRENEURIAL ORIENTATION AND BUSINESS MODEL INNOVATION TOWARDS COMPANY PERFORMANCE BY OBSERVING THE FACTOR OF FORMALIZATION AND THE INFORMATION TECHNOLOGY CAPABILITY

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ABSTRACT
This research investigates the effects of entrepreneurial orientation in the innovation of business models that affects the increase of company performance in the application and games industry. The formalization that is present in the organizational structure and capabilities of information technology can affect the orientation of entrepreneurial orientation. The research data is accumulated from 64 companies, through the implementation of the purposive sampling method. The data analysis is done by using the Structural Equation modelling (SEM) with the method of Partial Least Square (PLS). The result of the study shows that the level of formalization does not have any impact on the orientation of entrepreneurial orientation. Information technology capability is vital to the development of the entrepreneurial orientation. To increase its performance, companies of applications and games must continuously develop its business model innovation. Further research is expected to be able to develop the idea for other creative industries and add other variables that influence the entrepreneurial orientation as well as the business model innovation.

Keywords: formalization, information technology capability, entrepreneurial orientation, business model innovation

1. Introduction
To overcome the continuously growing business environment, companies need to make an adaption to the business models it already has. The competitive environment is filled with dynamics and consumer preference that is continuously migrating, requiring companies to make changes towards the business model design that it possesses (Zott & Amit, 2016). Therefore, research regarding business models and business model innovations in the current time is highly attractive in management research and attracts plenty of practitioners (Clauss, 2016). Business models reflects what the customer wants as well as how the company can arrange the best when it comes to creating, giving, and attachment of values, while business model innovations is highly related to the notion of vision, imagination, and entrepreneurship (Foss & Saebi, 2016).

Research about business model innovations is highly related to entrepreneurship, due to the nature of research in entrepreneurship that tends to analyse new businesses or industries that is encouraged by the need of innovation (George & Bock, 2011). Aside from that, innovation is reflected in the activity of entrepreneurship that is aimed
to maintain regeneration and rejuvenation of organizations, renewal of strategy, and the redefinition of organization (Covin & Miles, 1999). There is a need of deeper research when it comes to the role of entrepreneurship orientation in the development of business model innovations and its effects towards the performance of business model innovations (Karimi & Walter, 2016).

Currently, the information technology capability has a vital role towards the performance of product innovation, in which the orientation of entrepreneurship is able to bridge the influence of the information technology capability towards the performance of product innovation. Other than that, the information technology capability can also shape a stronger foundation for technology that will facilitate the process and operations that will be more flexible to launch and implement new businesses, develop new products, and renew business process and models (Chen et al., 2015). Ha and Kankanahali (2017) mentions that the entrepreneurial orientation in a company is determined by how large the implementation of information technology is. The implementation of information technology will determine the entrepreneurial action in the invention of new business (Wang et al., 2016).

Foss et al. (2014) highlights that the invention of probability in entrepreneurship is different from the realization of the probability itself. The realization of probability requires procedures and coordination that are clear and structured between all elements within the company. Within this, the formalization that is developed by the company has a central role in the efforts to realize a probability into a beneficial business. Formalization also gives explicit rules which are needed to control bureaucracy and to give a behavioural standard in the organization. However, formalizations that are too tight might also cripple divergency of knowledge and the tendency to discover variations (Kalay and Lynn, 2015). Researches regarding the innovations of business models often disregards the importance of formalization, while business model innovations needs changes within the limits of the company, and there is usually a need for change within the structure and control of the internal organization, which leads to change in the culture of the company (Leih, Linden, & Teece, 2015).

Even though there are relations between business model innovations and the entrepreneurial orientation, there is still little research that explores the relations between the entrepreneurial orientation and business model innovation and the implications of business model innovation towards the performance of companies in different contexts (Foss & Saebi, 2016; Karimi & Walter, 2016). One of the context of research that is interesting to research about is the industry sector of applications and game developer. In this creative subsector, they develop products, services, business models or organizational structures that are new, and they provide innovative inputs for other companies in the creative and non-creative industry (Kohn & Wewel, 2018). Innovation is the core of their business as well as the continuous development of business models that are being done towards companies that are developers of applications and games. These companies often experience change and business model innovation due to their needs to overcome the lack of resources and the need to adjust internal resources that are gained with external conditions (Ghezzi & Cavallo, 2018).

This research studies how the influence of the entrepreneurial orientation, in its relations with formalization and the information technology (IT) capability, influences business model innovations in the achievement of performance on companies in application and games industry. In this research, the application and games industry is defined as companies in the field of digital industry that already has a business entity or digital products that have been released to the market. The digital industry field covers e-commerce, financial technology, game developments, and the development of digital applications in different sectors (Badan Ekonomi Kreatif, 2018).

2. Theoretical Background and Hypothesis

Business Model and Business Model Innovation

Teece (2010) defined business model as a design or architecture about the mechanism of creation, delivery, and capturing value of a company. Business models refers to how a company can gain profits in a clear manner by placing itself in a chain of scores (Rappa, 2000). Within a business model itself, there are several key elements which are customer value proposition, profit formula, resources, and process, which when related to each other can create and deliver scores (Johnson, Christensen, and Kagermann, 2008).

Companies must always be innovative especially in the middle of the rise of global competition and changes in technology, as well as when dealing with changes in the internal and external environment. The current business model that is owned by the company must be criticized and seen from a dynamic perspective, there has to always
be a consciousness to evolve or innovate the business model (Wirtz et al., 2015). Innovations towards business models is one of the initiatives of the orientation of entrepreneurship in a company, business model innovations also describes how a company does transformations in order to increase its performance and gain competitive advantage, while allowing companies to exploit and utilize probability (Cucculelli & Bettineelli, 2015).

Foss & Saebi (2017) defines business model innovation as a company that has a new element and is designed towards the main elements in the company's business model or architectures that is related to the elements, business model innovation represents the new and more thorough innovation within the organization. Business model innovation can be made by changing older business models with newer ones, by offering products or services that is evolutionary or has never been seen before (Karimi dan Walter, 2016).

**Entrepreneurial Orientation**

In the context of organization, the entrepreneurial orientation portrays the presence of a vision, where organizations at large relies on activities of entrepreneurship with the purpose to continuously do a rejuvenation of organization and the scope of the organization's operational, through exploration and exploitation of probabilities of entrepreneurship (Wang et al., 2015). The entrepreneurial orientation portrays the process of when companies look for ways to make innovation, create transformations, and new business lines, by changing the business domain or strategic processes with the purpose to increase the performance of the company (Simset et al., 2009).

Karimi & Walter (2016) mentions four attributes of the levels of entrepreneurship of a company within an organization, which is (1) autonomy, which shows how far the company has jurisdiction and control over the choice of new products, the arrangements of resources needed and the development process, (2) risk taking, which shows how far the company is willing to explore towards things that are not known yet, taking risks when no data is available, funding of new products which are not the main focus of the company when there is a possibility of the product failing, and the willingness to develop and commercialize products which are not the main focus even when it has the probability to end the main focus of the business, (3) proactiveness, which shows the active behaviour of looking for opportunities to develop products, services, or even capabilities which are new to anticipate possible requests in the future, (4) innovativeness, which shows the tendency and urge in implementing creative behaviour and experiments towards products or services, or the development process through technology as well as research and development (R&D).

**Formalization**

The level of formalization that is implemented by companies will determine the strategies that are employed by the company. Structures of organization that is developed by a company will determine the mechanisms that connect and coordinate the members of the company accordingly to the role, authority, and power that is possessed. The form of formalization that is chosen within the structure of an organisation highly determines the success of the company in facing the environmental demands that are growing to be more and more dynamic (Kanten et al., 2015).

Plenty of studies shows that high levels of formalization will limit or slow the innovation in the organization. Formalizations mentioned are implied contradictorily by limiting the entrepreneurial abilities that are possessed and the experimentations that are done by the company. Foss et al. (2014) considers that formalization can give a clear roadmap to all members of the organization regarding their tasks that are needed in order to succeed in realizing the opportunity. The process of formalization might decrease the need of resources and accelerate opportunity realization by facilitating the coordination between the needed assets, investments, and actions that are needed to change the discovered opportunity into a marketable product.

**Information Technology Capability**

Information technology capability, including their potential to change the resources can increase the value that is created for a business (Kim et al., 2016). Doz & Kosenen (2010) emphasizes the need of strategic agility, including the ability to reallocate resources dan increase abilities to support the new business model, including the role of information technology in supporting the success of business models.
The information technology capability refers to the capability of the company to mobilise and utilize resources that are based in information technology into combinations or together with other resources and capabilities (Chen et al., 2015). The capabilities of information technology are mirrored within four dimensions, which are (1) IT infrastructure flexibility, which refers to how far the infrastructures of information technology is within the company in scale, module, and compatibility with the previous systems and the ability to handle several business applications (2) IT integration which is related to how far a company associates information technology possessed with business partners, helping the partners to exchange information, communicate, and create collaborative relations (3) IT business alignment, which shows the lengths of the functions of information technology that are operated and are aligned with the business goals (4) IT management, which refers to the capabilities of the company to effectively implement activities that are related with information technology such as project management TI, system development, and evaluation as well as the control of information technology.

There has been several findings about the effects of formalization towards the culture of organization specifically the culture that is directed at innovations. However, Foss et al. (2014) emphasizes that formalization is vital in order to realize opportunities. Formalization helps ensure that the individual and team will not be chasing after random or excessive probabilities which are inconsistent to the mission and strategies of the company (Caruana, Morris, & Vella, 1998). Companies need approaches which are new and more controlled in operating the process of innovation which includes the introduction to the gradual development of the model innovation that is more formal. This model emphasizes the need of planning, but also the need of intuition, that can be customized accordingly to the orientation of entrepreneurship within the company. According to the essay above, a hypothesis can be formulated, such as:

H1: Formalization impacts the entrepreneurial orientation.

In the midst of disruption of digitalization, the role of information technology has become much more significant. The information technology capability has a vital role in providing relevant information; facilitating communication and interaction within the company; while intensifying the speed and effectiveness to support company transformation (Chen et al., 2015). Success of activities of company entrepreneurship is dependent on how the company can quickly and efficiently repair and adapt business activities, process, and structures within the company. The information technology capability is expected to be the foundation of technology that is able to facilitate the process and operations that is more flexible in the development of new business models. Built upon the essay above, a hypothesis can be worded as:

H2: Information technology capability effects the entrepreneurial orientation.

Companies that possesses strategies to develop the entrepreneurial might have the ability to overtake growth through new venture opportunities and strategic renewals. Entrepreneurial orientation represents the framework of thought and perspective of entrepreneurship that is mirrored in the process and culture of the company (Dess & Lumpkin, 2005). Karimi and Walter (2016) conceptualizes fours dimensions that are used to measure the levels of entrepreneurship of a company within an organization, which are autonomy, risk taking, proactive, and innovativeness. Following the development of the four attributes of the entrepreneurial orientation, the company will gain the capabilities to do business model innovation. Therefore, a hypothesis can be formulated:

H3: Entrepreneurial orientation has influence on business model innovation.

Plenty of contributions on the literature of business models concludes that business model innovations can be an important factor that drives the performance of the company. Business model innovation positively affect company performance, even in differing conditions of business environments (Foss & Saebi, 2016). Cucculelli and Bettinelli (2015) discovers that companies that modifies their business models from time to time and innovatively, experiences positive effects on the performance. Business model innovation aids companies to build competitive advantage by creating new business models to generate values for the customer and avoid direct competition. A hypothesis can be formulated accordingly:

H4: Business model innovation affects company performance

Presence of entrepreneurial orientation within an organization is something that is crucial, however in order to increase performance, companies must also consider how they can carry out innovations in the creation of value,
deliver the proposition of values, and capture of values in business model innovation (Karimi & Walter, 2016). Consequently, a richer understanding about how the orientation of entrepreneurship affects performance also needs the understanding of the role of business model innovations in the relations. Hence, a hypothesis is formulated as such:

H5: Business model innovations mediates the relations between the relations of entrepreneurial orientation and company performance.

Through the essays of hypotheses above, it is possible to create research models to investigate the role of formalization and the information technology capability towards entrepreneurial orientation that affects business model innovation that eventually influences the company performance as can be seen in Figure 1.

![Figure 1. Theorical Research Model](source: Authors, 2020)

### 3. Research Methodology

Data is obtained through questionnaires that are distributed through email by sending the link to the questionnaire in the Google Form that is given immediately to the respondents. Population of respondents in this research is companies of the industry of application and games that are registered to Indonesia’s Mapping & Database Startup of the Creative Economic Body 2018 (Mapping & Database Startup Indonesia Badan Ekonomi Kreatif 2018) which consists of 992 companies. The respondents are decision makers on the managerial level on the marketing branch of the company. Utilizing the purposive sampling method, empirical data were gained from 64 respondents which were used in the data analytics.

Five sets of measured attributes in the questionnaires have been developed, which were defined to generate the corresponding seven latent variables with their operational definition as presented in Table 1.

| No. | Latent Variables/Constructs | Operational Definition | References |
|-----|-----------------------------|------------------------|------------|

Table 1. Operational definition of the Latent Variables as the base for developing the sets of Measured Attributes
1. **Formalization**
   1. Levels of formal procedures that are used by companies for its ongoing activities
   2. Levels of formal interaction that are used
   3. The amount of written rules and procedures that are used

   Caruana, Morris, & Vella (1998)

2. **Information technology capability**
   1. Capabilities that are built through four components which are: (1) Flexibility of the information technology infrastructure; (2) Integration of information technology; (3) IT business alignment; (4) Management of information technology

   Chen et al. (2015)

3. **Entrepreneurial orientation**
   1. Levels of autonomy that are possessed by a company to implement actions, the degree of risk taking, levels in proactiveness, and innovativeness.

   Lumpkin et al. (2009)

4. **Business model innovation**
   1. Innovation in the creation of values for customers that will benefit the company

   Clauss (2016)

5. **Company performance**
   1. The increase in sales and benefits within the last three months

   Chen et al. (2015)

Data analysis were done by using the Structural Equation Modelling (SEM) with the method of Partial Least Square (PLS) through two different phases of analysis which are: (1) Analysis of the measurement model (outer model); (2) Analysis of the structural model (inner model). Through this, the result of the hypothesis test was gained and is later followed by a discussion that is based on the test.

4. **Result**

   Descriptive methods gained from the respondents can be seen in Table 2.

   | No. | Type               | Group         | Total | Percentage |
   |-----|--------------------|---------------|-------|------------|
   | 1   | Gender             | Female        | 18    | 28.1%      |
   |     |                    | Male          | 46    | 71.9%      |
   | 2   | Age                | 20 – 32       | 32    | 50.0%      |
   |     |                    | 33 – 40       | 19    | 29.7%      |
   |     |                    | 41 – 49       | 13    | 20.3%      |
   |     |                    | > 49          | 0     | 0.0%       |
   | 3   | Education          | Doctoral Degree| 1    | 1.6%       |
   |     |                    | Master Degree | 10   | 15.6%      |
   |     |                    | Undergraduate | 42   | 65.6%      |
   |     |                    | Diploma       | 7    | 10.9%      |
   |     |                    | High School   | 4    | 6.3%       |
   | 4   | Working Period in the Company | 0 – 5 years | 58 | 90.6% |
   |     |                    | 5 – 10 years  | 4    | 6.3%       |
   |     |                    | > 10 years    | 2    | 3.1%       |
   | 5   | Position in the Company | Owner       | 15   | 23.4%      |
   |     |                    | Director      | 21   | 32.8%      |
   |     |                    | Manager       | 28   | 43.8%      |

Measurement model fit also meets the standard of reliability and validity, by yielding the score of Standardized Factor Loading (SFL) ≥ 0.50, Cronbach’s Alpha (CA) ≥ 0.70 and Composite Reliability (CR) ≥ 0.70 (Table 3).
| Variable                        | SFL ≥ 0.50 | CA ≥ 0.7 | CR ≥ 0.7 | Notes   |
|--------------------------------|------------|----------|----------|---------|
| **Formalization**              |            |          |          |         |
| FO1                            | 0.579      |          |          | Valid   |
| FO2                            | 0.675      |          |          | Valid   |
| FO3                            | 0.801      |          |          | Valid   |
| FO4                            | 0.788      |          |          | Valid   |
| **Information Technology Capability** |          |          |          |         |
| - IT Infrastructure            |            |          |          |         |
| IF1                            | 0.844      |          |          | Valid   |
| IF2                            | 0.888      |          |          | Valid   |
| IF3                            | 0.853      |          |          | Valid   |
| IF4                            | 0.857      |          |          | Valid   |
| - IT Integration               |            |          |          |         |
| INT1                           | 0.946      |          |          | Valid   |
| INT2                           | 0.940      |          |          | Valid   |
| - IT Business Alignment        |            |          |          |         |
| BA1                            | 0.838      |          |          | Valid   |
| BA2                            | 0.867      |          |          | Valid   |
| BA3                            | 0.908      |          |          | Valid   |
| BA4                            | 0.777      |          |          | Valid   |
| BA5                            | 0.834      |          |          | Valid   |
| BA6                            | 0.900      |          |          | Valid   |
| - IT Management                |            |          |          |         |
| MA1                            | 0.853      |          |          | Valid   |
| MA2                            | 0.885      |          |          | Valid   |
| MA3                            | 0.913      |          |          | Valid   |
| MA4                            | 0.983      |          |          | Valid   |
| MA5                            | 0.926      |          |          | Valid   |
| MA6                            | 0.945      |          |          | Valid   |
| **Entrepreneurial Orientation** |            |          |          |         |
| - Autonomy                     |            |          |          |         |
| OM1                            | 0.710      |          |          | Valid   |
| OM2                            | 0.856      |          |          | Valid   |
| OM3                            | 0.672      |          |          | Valid   |
| - Risk taking                  |            |          |          |         |
| RT1                            | 0.708      |          |          | Valid   |
| RT2                            | 0.735      |          |          | Valid   |
| RT3                            | 0.826      |          |          | Valid   |
| RT4                            | 0.635      |          |          | Valid   |
| - Innovativeness               |            |          |          |         |
| IN1                            | 0.648      |          |          | Valid   |
| IN2                            | 0.901      |          |          | Valid   |
| IN3                            | 0.896      |          |          | Valid   |
| - Proactiveness                |            |          |          |         |
| PRO1                           | 0.896      |          |          | Valid   |
| PRO2                           | 0.917      |          |          | Valid   |
| **Business Model Innovation**  |            |          |          |         |
| - Value Creation Innovation    |            |          |          |         |
| VC1                            | 0.723      |          |          | Valid   |
| VC2                            | 0.795      |          |          | Valid   |
| VC3                            | 0.790      |          |          | Valid   |
| VC4                            | 0.801      |          |          | Valid   |
| VC5                            | 0.683      |          |          | Valid   |
| - Value Proposition Innovation |            |          |          |         |
| VP1                            | 0.844      |          |          | Valid   |
| VP2                            | 0.840      |          |          | Valid   |
| VP3                            | 0.850      |          |          | Valid   |
| VP4                            | 0.825      |          |          | Valid   |
|                | VCI1 | VCI2 | VCI3 | VCI4 | VCI5 | Company Performance | PER1 | PER2 | PER3 |
|----------------|------|------|------|------|------|--------------------|------|------|------|
| Value Capture Innovation | 0.750 | 0.783 | 0.866 | 0.794 | 0.824 | 0.937 | 0.960 |      |      |
| Reliable        | Valid | Valid | Valid | Valid | Valid |        |      |      |      |

Source: (Data processed, 2020)

Structural model fit is associated with hypothesis testing. The hypothesis is accepted when the absolute t value \( \geq 1.96 \) (Hair et al., 2018). The result shows that all relationship between latent variables are accepted for t value is greater than 1.96 (Figure 2, Table 4).

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Figure 2. Overall model Research

Table 4. Hypothesis Testing Results

| No | Hypothesis                                      | T-value | Conclusion      |
|----|-------------------------------------------------|---------|-----------------|
| 1  | Formalization → Entrepreneurial Orientation     | 0.079   | Not supported   |
| 2  | Information Technology Capability →            | 3.394   | Supported       |
|    | Entrepreneurial Orientation                     |         |                 |
To test hypothesis 5, the formula used was submitted by Kenny and Baron (1986). In order to test the indirect influence, there are four steps that can be done: The first step is to test the direct influence from predictor to criterion. In this first step, it can be seen that entrepreneurial orientation has a direct effect to company performance ($t = 2.669; p < 0.05$).

In the second phase, it can be seen that the predictor (entrepreneurial orientation) has an influence towards mediator (business model innovation) ($t$-value $= 6.020$) and in the third phase it can be viewed that the mediator also affects the criterion (company performance) ($t$-value $= 4.056$). By following the phases by Kenny and Baron (1986), it can be concluded that business model innovations mediates the influence of entrepreneurial orientation towards company performance.

**Figure 3. The Direct Effect of Entrepreneurial Orientation to Company Performance**
Following that is the fourth phase, which is aimed to see the influence of predictor (entrepreneurial orientation) towards the criterion (performance) while still including the influence of the mediator (business model innovation). From the testing results, it can be concluded that when the influence from the mediator is included to the model, it results in the disappearance of the direct influence from the predictor (entrepreneurial orientation) towards the criterion (company performance) which means that business model innovation have influence on full mediation.

5. DISCUSSION

Following the results of the hypothesis test, it can be seen that formalization does not have a significant impact on entrepreneurial orientation. Previous researches shows that there are inconsistencies in the relationship between formalization and business model innovation. However, from other researches it can be seen that a high rate of formalization will affect the decision making process and bureaucratic actions that will hinder the appearance of new ideas.

The research is done within the application and games industry, where products that are created are the innovations itself that is the materialization of added value that was born from human creativity, based on knowledge, cultural heritage, and technology. In its early stages of development, companies use structural organizations that are simple and adhocratic to implement, since it is needed to have a softer approach towards the uncertainty within the organization. However, when stepping into the growth phases of the organization, it can move towards a more static structure where the roles and responsibilities must be explained in more detail (Mitchell, 2016). This is a challenge for companies in the creative industry since they have to maintain the creativity and innovation as the company matures. This research shows that there is a lack of significance of formalization in its influence to its relations to business model innovation, there needs to be further research that is done in the future.

The presence of significant influence of the information technology capability towards entrepreneurial orientation supports the result of research from Chen et al. (2015) in which entrepreneurship functions as mediation between the information technology capability towards innovation performance. Digitalization of technology which is faced by nearly all sectors of economy, specifically the sector of applications and games that is made as the main focus this research, information technology capability has a significant influence towards entrepreneurial orientation. Firstly, the research confirms that information technology capability increases the company’s ability to see chance in doing innovations and adaptations towards the continuously changing business environment (Holmes et al., 2015). Secondly, entrepreneurial orientation also functions as mediation and utilization of
information technology capability which is the infrastructure, integration, business alignment, and management of information technology to perform business model innovation (Chen et al., 2015).

Results from the research also shows the presence of influence from entrepreneurial orientation towards business model innovation that is in line with the result of research from Karimi & Walter (2016) that mentions that entrepreneurial orientation is positively associated to the level of adoption towards business model innovation. The presence of entrepreneurial orientation within a company affects the presence of innovation, risk taking, bigger autonomies, as well as higher levels of proactiveness, which leads companies to have better creativity and adaptability. In companies which focus on applications and games, all actions of entrepreneurship relates to business model choices and this will impact in changes in component or architecture of the business model owned by a company (Foss & Saebi, 2017).

Influence of entrepreneurial orientation towards business model innovation can be seen by the prevention of organizational status quo, which is created by the existence inertia. This can happen due to the growth of risk taking behaviors, acceptance of competition, as well as proactive organizational behavior that changes certain situations which has never been encountered before in the structure and governance of the organization (Zott & Amit, 2010).

The result of the research once again supports the result from Karimi and Walter (2016) in their research which mentions that within the architecture of business model innovation, the increase of innovation towards business models will positively impact the capture of value that is gained by business model innovation in the increase of company performance. Landscape of the business environment that is increasingly influenced by digitalization forces companies to continuously iterate business models. Consumers nowadays are more connected by digital technology, new applications, services, data, as well as devices and has created new areas of competition for all companies that is interested to utilize new opportunities that come up. With this change, companies need to develop new business models in the digital world and must be able to create values for the customers (Amit & Zott, 2001).

For many application and game companies, the basic challenge lies in the business model innovations that needs to be done continuously at a fast pace in order to be able to find a business model canvas that is appropriate and acceptable for the market. Therefore, evaluations towards information technology that is possessed must be accompanied with precise levels of entrepreneurial orientation within the framework of business model innovations is something that must be noticed to increase company performance

6. CONCLUSION

This research is done to discover whether the influence of formalization and information technology capability towards entrepreneurial orientation relates to the development of business model innovation and company performance. Result of the research shows that within the context of application and game industry sector, high levels of formalization actually decreases the entrepreneurial orientation that is needed to create business model innovation that leads the increase of company performance. Within the game and application industry, entrepreneurial orientation can be increased by continuously developing the information technology capability. In the companies of application and games, business models of companies are strongly reliant on the information technology capability and to be able to continue to compete, companies must continuously carry out evaluations towards the possessed information system in order to be able to provide better services compared to its competitors, by doing innovations to its possessed business models.

Confronted with the rapid development of information technology, companies in the application and games industry must be able to develop capabilities of information technology to increase the entrepreneurial orientation that is more adaptive in responding the development of the business environment through business model innovation. Innovations in terms of value creation, value delivery of the innovation to customers, and acquisition of economic value from innovations will deliver a vital contribution to a company performance. Business model innovation will also mediate the relations between entrepreneurial orientation with company performance, so that in order to increase performance, the development of entrepreneurial orientation must be able to create business model innovation.
Further research is expected to be able to widen the object of research to other creative industries. Other than that, there needs to be a consideration to add other variables such as company culture, leadership, employee commitment, resource empowerment system, and the company's strategic agility.

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