# The Necessity of Innovative Sustainable Project Management (ISPM) Utilization for Adapting the New Digital Trends: A Thematic Analysis for Effective Value Creation in the French Wine Industry

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Abstract:- Nowadays, environmental issues have attracted attention in various fields. Not only the negative impact of the greenhouse on all kinds of industries and humanity but also the prevalence of global infectious diseases brings a great depression on economic and social development such as the Covid-19 crisis. Moreover, the frequent occurrence of wars has also had a substantial adverse impact on global peace, international business, and the prosperity of the global economy. Therefore, the Sustainable Development Goals (SDGs) which were officially offered by the United Nations in 2015 have been propelled to worldrecognized supremacy. However, as the rapid development of the Internet meets the needs of modern society, the 5G era requires organizations to explore and develop the digital fields with innovation and technology, especially traditional industries such as the French wine industry, which must also explore new development directions and business models to adapt to today's business environment and achieve more value creation under the guidance of sustainability. This research paper aims to expound on the necessity of using the new approach of innovative sustainable project management (ISPM) in the French wine sector to achieve the digitalization transformation and create more value. A thematic analysis with in-depth semistructured interviews was conducted, expert sampling was priority used as one of the purposive sampling methods, and NVivo was chosen for manual coding and data analysis. The strategy of effective value creation in the wine business has been proposed for post-pandemic adaptation.

**Keywords:** C Sustainability; Innovation; Sustainable Project Management; Value Creation; Wine; Digital.

## I. INTRODUCTION

Nowadays, climate change issues bring a great negative impact on humanity (Lorençone, Kamila Cunha de Meneses, Jose Reinaldo da Silva Cabral de Moraes, 2010). Since United Nationals put 17 Sustainable Development Goals (SDGs) on the important agenda, sustainability is a significant theme that the whole world is concerned about. Moreover, environmental diversity brings a lot of negative impacts on human beings, such as natural disasters, and transmitting illnesses like Covid-19. Due to the Covid-19 crisis, which led to a great depression on not only the economy but also the whole society. Therefore, under the circumstances of global warming and a complex global environment (micro and macro), project managers must adhere to the 17 SDGs' targets and focus on sustainable project management not only to achieve organizational goals, satisfy stakeholders simultaneously, but also to consist with the environment to realize sustainability. These further requirements make project managers have to use innovation and new technologies.

In an environment with great non-determinacy, project managers have to face the challenges of business performance decline, which is one of the most critical factors that influence companies competitive advantage (P. Mazzola et al., 2013). At the business strategy level, sustainability will help companies for value creation by efficient recruitment to find out the best ways for controlling resources in order to improve competitive advantages (M. A. Sánchez, 2015). Moreover, projects nowadays play an indispensable role in more sustainable business practices, and the sustainability concept has been always linked to project management at present (A. J. G. Silvius, R. P. J. Schipper, 2014). Furthermore, different from the original concept of project management, sustainable project management (SPM) is concerned more with the environment, economy, society, and purpose (J. Carboni, W. Duncan, M. Gonzalez, P. Milsom, M. Young, 2019). The International Project of Management Association (IPMA) states that a key development of project management is to realize the sustainability concept in project implementation which is required by project managers (M. McKinlay, 2008). However, due to the environmental diversity and uncertainty situation intensifying, innovation plays a very important role in SPM which the paper would expound on. My previous studies proposed the new innovative sustainable project management model (ISPM) (Fig.1 The

ISPM Model) that emphasized the importance of innovation and would help organizations achieve value creation to a great extent. This paper would use thematic analysis to expound the necessity of innovation in sustainable project management implementation in the French wine industry and highlight a strategy for value creation as the Fig. 2 shows

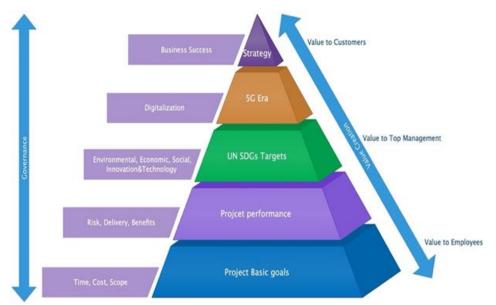


Fig 1 The ISPM Model (Z. Ruixin, 2022)

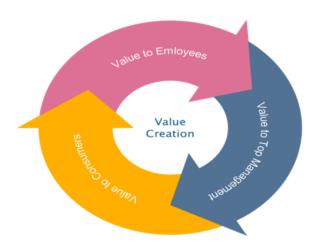


Fig 2 Value Creation Circle

Although the ISPM Model has been proposed as a literature review in my previous study (Z. Ruixin, 2022), it has not been introduced and explained in great detail. This paper mainly pays attention to the necessity of innovation-focus project management implementation to adapt to the digital trend and gives the strategy of value creation for wineries in France.

Even though sustainable project management has become an inevitable trend of development, the frequent occurrence of natural disasters and outbreaks such as Covid-19, has made various industries difficult to survive, especially traditional industries. The business has been reacting to the Covid-19 crisis since March 2020, and a number of companies' reports showed that there were significant disruptions to sales activity (B. H. Meyer, B. Prescott, X. S. Sheng, 2022). Moreover, With the high development of the internet and the arrival of the 5G era,

innovation and technology have become critical factors in increasing business competitive advantage in various industries, and also be one of the inevitable trends in the development of sustainable project management. According to Porter's study, value creation originates from different functional activities of companies, including production, marketing, delivery, and servicing of the product (M. E. Porter, 1985). Gaining competitive advantage is a significant goal of firms if they want to achieve more value (R. Patnaik, P. Sahoo, 2009). Moreover, the added value of IoT-based IT systems have impacted organizational performance (H. Wang, X. Luo, X. Yu). Thus, some organizations have already integrated the evolving technologies in the domain of the Internet of Things (IoT) into the applications used for real-time project management to achieve efficiency (G. Sudeep, L. Fernando, N. Tahereh, 2016). Therefore, the transformation of traditional industries led by innovation has taken over a significant role, which

helps organizations achieve value creation in an uncontrollable environment in order to survive.

As a dominant position in the world, the French wine industry has been also inevitably affected by climate issues, an epidemic breaking out, and an unstable international environment. Viticulture is very sensitive to the climate, the word "terroir" is the soul of the wine, which relates the sensory attributes of wine to the environmental conditions in which the grapes are grown (G. Seguin, C. V. Leeuwen, 2007). The wine quality is based on "terroir" which directly affects consumers' satisfaction with the taste of wine (C. Mauracher, I. Pocidano, G. Sacchi, 2016). As well as the impact on viticulture and wine production, wineries have to face the challenges of exploring the new business model as well (P. Pradier, 2020). Meanwhile, the Covid-19 crisis has brought a great negative impact on the wine industry, organizations must take corresponding measures to keep stable development and be fully aware of challenges and opportunities in the period post-COVID-19. Therefore, it is necessary to make changes based on the traditional industry model.

Thus, my proposition is that continue to analyze the ISPM model that was offered previously, emphasis on the necessity of innovation for sustainable project management in the French wine industry, and give the strategy of value creation to better meets the needs of sustainable development nowadays. The aim of the paper is to explore the necessity of utilizing the ISPM in the French wine industry through a thematic analysis, and an in-depth semi-structured interview was conducted in order to help organizations for digital transformation and value creation in the meanwhile.

## II. LITERATURE REVIEW

Since the Sustainable Development Goals proposed by the United Nations General Assembly (UN-GA) in 2015, it provided a shared blueprint for peace and prosperity for people and the planet, now and into the future (World leaders adopt Sustainable Development Goals, 2015) (UN resolution, 2017). Although various industries have taken action to face climate and environment issues, the challenges are still in a rising state, it seems to lead to a more serious climate catastrophe. Climate change has always been the center of attention since the 21st century, which is a continuous spatiotemporal reality, and drives considerable problems for the sustainability of enology in several geographical regions, also giving a huge impact on risk in the wine industry (B. Carmen, F. Mariagiovanna, R. Pasquale, 2019; D. Fotoula, C. Ioannis, 2021). However, as the COVID-19 crisis has swept the world for three years, the implementation of Sustainable Development Goals (SDGs) has received devastating blows and obstacles. SDG Progress Report 2022 shows that the SDGs' development progress has been halted or reversed for years or decades. Meanwhile, the world is also suffering the highest number of violent conflicts (SDG Progress Report 2022). The COVID-19 pandemic brought a lot of change and uncertainty to all levels of society around the world (D.

Roberts, Z. Ligita, 2023). Therefore, sustainability becomes the main topic of the world's concern, and innovative technology such as Artificial intelligence (Ai), big data analysis, Internet of Things (IoT), etc., exactly make a great contribution to realize sustainability as the 2030 Agenda advocated.

Planetary boundaries (PB) pointed Out environmental changes and uncertain situations have brought a lot of risk to humanity's safety (W. Steffen, K. Richard, 2015). The COVID-19 crisis has had a critical negative effect on both human activities, economic growth, companies' development such as profitability, operational, economic, and access to finance (Raúl Siche, 2020; D. Lijie, R. Asif, W. Muhammad, 2023). What's more, a greater number of firms reported significant disruptions to their business, and the sales activities of traditional industries have been hit hard during the Covid-19 period (B. Meyer, B. Prescott, X. Sheng, 2022). A firm's investment scale and sales revenue become smaller during the COVID-19 crisis as well, which brought a significant negative impact on organizations' performance (S. Huayu, F. Mengyao, P. Hongyu, 2020). Moreover, to avoid the rapid spread of the virus among the population, people were forced to work from home and avoid social gatherings and contact (J. Singh, 2020). Social networking sites were becoming more and more mainstream. Therefore, COVID-19 led to the promotion of digitalization in societies and online activities (E. Sadjadi, 2023). Moreover, the COVID-19 pandemic likely aggravated people's awareness of health coverage (M. Cabanillas, P. Jorge, 2023). Thus, business and policymakers have to pay attention to strengthen and develop healthy and safe work on the post pandemic period (J. Honan, M. Ingram, et al, 2023). Sales growth with diversification strategies brings value to the company, which will be led to a new business situation that helps the company tide over the difficult period (T. Kwon, S. Bae, S. Park, 2021). Therefore, wineries and wine firms have to improve and adopt new business processes and strategies to face the challenges that emerged during the pandemic (M.M. Islam, F. Fatema, 2023).

Digital technology change is a driver of transformation relevant to all the industry and parts of society nowadays (P. Thomas, D. Nicolas, 2019). The advent of 5G technology and digital transformation is not only just a generational step but also opens up a new world of possibilities for every industry. Motived by the fourth industrial revolution proposed by Klaus Schwab, the world is digital domains and people's lives can be managed by the use of innovative connected technology, such as a fusion of advances in artificial intelligence (AI), robotics, the Internet of Things (IoT), Web3, blockchain, 3D printing, genetic engineering, quantum computing, and other technologies, which is the collective force behind many products and services that have become indispensable to modern life (M. Devon, 2023). The example of IoT-based platforms can gather data to make the decision-making process faster and more efficient. Data-driven decision-making is bound to have an even broader prospect for development (E. Nel, A. MacLachlan, et al., 2023). Moreover, many scholars have

begun to pay attention to the connection between digitalization and sustainability, which are all bellwethers in today's world and interact with each other, the new concept of "digitainability" has recently been proposed to underscore potential cross-fertilization effects between digitalization and sustainability (L. Ulrich, 2021). Therefore, digitalization has made a great contribution to more efficient and precise sustainable project management measures. Therefore, traditional sustainable project management has no longer be able to meet the current environmental changes thoroughly as innovation and digital technology become the essential factors for business success, organization's value creation, and the indispensable condition to projects and project management (M. Trzeciak, T. P. Kopec, A. Kwilinski, 2022).

In addition, digitalization has been the inevitable trend of industry development, and it has greatly facilitated SDGs targets. Since the business environment has been enriched by technological progress nowadays, organizations have to increasingly rely on innovative project management methods for creating more value, which will lead the production and capabilities more competitive (E. Akhmetshin, P. Romanov, R. Zakieva, A. Zhminko, R. Aleshko, A. Makarov, 2019). Due to the Covid-19 crisis, in order to prevent the spread of the epidemic on a large scale in society, people were forced to work from home for a long time, which was more dependent on the organization's digital operation and management. Many firms have been forced to conduct digital transformation to adapt to a new

situation where people suffered from social limitations and traffic restrictions. COVID-19 has largely promoted the development of the digitalization process (A. Majeed, X. Zhang, 2023). Therefore, digital transformation affects ecosystems' structure and governance, especially during the epidemic period, the necessity of digital transformation is even more evident, organizations have to compete and organize for innovation in a digitalized world (P. A. Francesso, F. Frederico, M. P. Antonio, N. Paolo, 2021).

However, some differences and connections between project management and sustainable development were concluded by Silvius in 2012 (A. J. G. Silvius, 2012). As UN SDGs built sustainability as one of the world's foremost concerns, mutual enhancement between innovation& technology and the process of digitalization. Otherwise, the Covid-19 crisis was a booster, which has changed people's consumption habits to more dependent on the Internet, and has promoted the development of new media. However, based on high-tech and 5G digital systems, the original sustainable project management can be optimized to a greater extent, for example, the emergence of IoT, which can achieve to operate the process of given projects vary in purpose, geography, size, focus area, etc. Referring to the grading standard of KPIs-based framework in IoT (World Economic Forum: https://widgets.weforum.org/iot4d/index. html), the relationship and differences between PM, Sustainability, SPM, and IoT in the French wine industry were compared in detail in the table below.

Table 1 The Comparison of PM, Sustainability, SPM, and IoT in The Wine Industry

KPI	Project management	Sustainability	Sustainable project management	loT (example)
Scale of projects	Short- term oriented	Long-term/ short-term oriented	Both short- term oriented and long- term oriented	Reach from micro to macro level by scoring the number of individuals impacted, geography reach, and usage reach
Targets penetration	Sponsor/stakeholders	This generation and future generations	Balances the environmental, social, economic aspects of project-based working to meet the current needs of stakeholders without compromising or overburdening future generations	The percentage of SDG targets that the project benefit touches
Influence on targets	Deliverable/results oriented	Life-cycle oriented based on SDGs	Both individual and organisational responsibility to ensure that outputs, outcomes and benefits are sustainable over life cycles and during their creation, disposal and decommissioning	Determine how much the project outcome can influence an individual target within an SDG
Scalability and replicability potential	Depends on projects	Scalable or replicable (same target)	Scalable or replicable	Determine to what extent a project is structurally scalable (same target) or replicable (across targets, SDGs)
Focus on vulnerable groups	Focus more on scope, time, budget Low score on this KPI	People, planet, profit  Extensive focus on vulnerable groups, high score on this KPI	Sustainability as a fundamental competence vital for improving and facilitating effective project, programme and portfolio management Projects focus on vulnerable groups would score high on this KPI	Projects with extensive focus on vulnerable groups would score high on this KPI
Complexity	Reduced complexity	Increasing complexity	Increasing complexity	Increasing complexity (significantly impact on performance and availability)

Source: APM Body of Knowledge 7th edition
Silvius & van der Brink (2012)
World Economic Forum: IoT for Sustainable Development Project (https://widgets.weforum.org/iot4d/index.html)

As obviously reflected in table 1, took the example of IoT technology used in the French wine industry, the emergence of IoT takes into account the goals of project management and sustainable development, it realizes efficient and accurate operation of project management, and at the same time meets the targets of SDGs and contributes sustainable development. Other products of new

technology and digitalization such as AI, big data analysis, etc., also achieve a balance between efficient project management and sustainable development. Therefore, in the ISPM model, the digitalization process in the 5G era is proposed as an unmissable technology and an inevitable opportunity for sustainable project management nowadays.

Following the sustainability and digital tendency remarkable worldwide, sustainable project management become a topic for project managers to pursue. Project managers now are required to be responsible for the main objective that sustainable value creation for stakeholders (R. Michaelides, D. Bryde, U. Ohareri, 2014) (N. Moreno-Monsalve, M. Delgado-Ortiz, et al., 2023). Project managers have to face new challenges to take into account both the organization's internal performance and the influences of the external environment, which thereby being more sustainable, the project managers' responsibility has strengthened the project (Russell, 2008). From the project management methods to traditional contemporary new approach, project management focuses more on sustainable value creation in recent years. John Elkington proposed the triple bottom line (TBL or 3BL) in 1994 that it was the first time to combine the sustainability with project management development (John Elkington, 1994). Sustainable project management has gradually become the direction of organizations' development, and many organizations have used the TBL framework to evaluate their performance to create greater business value (F.S. Timothy, J.H. Tanya, 2011). At this stage, project management pays more attention to consumers' needs and stakeholders' benefits which were thought highly of impact on project and programme performance. Meanwhile, the meaning of existing sustainable project management is from compliance to value creation to adopt the business strategy and activities more appropriately, organizations have to consider the sustainable ways to implement project management that obtain resources that will be needed in the future, which meet current needs without risking future capabilities (T. Deloitte, 1992; N. Moreno-Monsalve, M. Delgado-Ortiz, et al., 2023).

Furthermore, due to the negative impacts of today's unfavorable environment, coupled with the rapid development processes of sustainability and digitalization, the French wine industry has to make changes to accelerate the process of digital transformation and find new business opportunities. The Wine Industry Network Evaluation Model (WINE-Model) proposed that it would be necessary to use new technologies and production systems to improve the wine market performance rate, expand market share, achieve sales growth, and increase brand awareness (M. A. Estrada, D. Park, A. T. H. Chin. 2020). However, sustainable project management practices and digitalization along the value chain of the French wine industry have not been explicitly analyzed by scholars so far. Due to COVID-19, people used more social media and relied on online sources and online shopping during the period of social restrictions (J. Abbas, D. Wang, Z. Su, et al., 2021). Consumer behavior and cognition have been changed by mandatory shutdowns and pandemic restrictions, which forced wineries and wine firms to be more innovative and sustainable, digital transformation must be a better way to adopt existing circumstances and future uncertainty although it is not an easy task for French wineries (B. M. Schmid, D.L. Williams, et al., 2022).

Since the concept of "Value Management Practice" proposed by Thiry in 1996, the identification of the stakeholders and their categorization played a critical role in the project's outcome, and stakeholders' expectations would deliver potential value (Thiry, 1996). Moreover, Lazar's study put forward the project value chain in 2011, which consisted of different project components, provided measures to identify the projects' major processes and defined project success (O. Lazar, 2014). Lean project management methods have risen up in the 21st century, thus, value creation has increasingly become the focus of project management, it has also become a critical part of SPM at the same time. Porter's value chain (Michael. Porter, 1985), as one of the most useful strategic management tools, proposed the importance of competitive advantage that helps companies to succeed in business. Therefore, a growing number of organizations are beginning to explore how to use part of open innovation in strategic management to achieve more value creation (P. H. Faridian, 2022). Although many scholars have conducted in-depth studies in value creation, how to use innovation-led sustainable project management methods to help the French wineries to achieve more value creation has not been involved.

Obviously, French wineries have realized the importance of innovation and digitalization and have begun to implement innovative and digital based sustainable project management methods, which cover viticulture, brewing, environmental and soil testing, management, and tourism (L. Thierry, D. Frédéric, et al., 2023; M. Dressler, I. Paunovic, 2021; P. Torres, M. Augusto, 2020). It is necessary to define a path that guarantees both stability achieved and new markets developed, which include increasing production capacity, investing internationalization, focusing on segmentation through innovation, diversification of products and business (A. Dora, M. Jose, et al., 2023). Meanwhile, project managers are now paying more attention to create value under the process of sustainable project management, and the just-intime approach of sorts that could reduce the wasting of resources and achieve sustainable recourses utilization which is the goal that project managers pursue nowadays (T. Hammervoll, 2009; R. Riccardo, M. Anna, Z. Lamberto, C. Cristiano, 2022). Under the unfriendly macro- and microenvironment, achieving green growth and a win-win situation should be used in the current and future development of the French wine industry, to ensure their pivotal position in the international wine industry (G. Zhou, J. Zhu, S. Luo, 2022; K. S. Herman, 2021). (G. Zhou, J. Zhu, S. Luo, 2022; K. S. Herman, 2021).

## III. METHODS

#### Research Approach and Methods

Thematic analysis with in-depth semi-structured interviews was conducted in this paper. Moreover, subjectivity is fundamental in qualitative research strategy. Subjectivism is known as interpretivism, which is defined as "our mental activities is the only unquestionable fact of our experience" (R. Alan, B. John, 1983). The interpretive

philosophy was used in this study, inductive approach with qualitative research was conducted in this paper.

Expert sampling was the priority purposive sampling method used in this paper, which was a type of purposive sampling technique that used when the researcher needs to glean knowledge from individuals that have particular expertise (N. Rai, B. Thapa, 2015). Purposive sampling is often used in a group of different non-probability sampling techniques. Purposive sampling allows the researcher to use their expertise to select a sample that is most useful for the purposes of the study and to improve the rigour of the study

and the trustworthiness of the data and results (C. Steve, G. Melanie, P. Sarah, 2020). In-depth semi-structured interviews have been conducted from March to June 2022, the sample population includes project managers from French wineries and wine experts who are well-known in the wine industry.

In-depth semi-structured interviews require a minimum sample size of between 5 and 25 (Kuzel, 1992 cited in Saunders, 2012; Cresswell, 2007). Therefore, a semi-structured interview of seven experts would be conducted in this study as the table shows below:

Table 2 In-depth Interview of Seven Experts in the Wine Industry

Participants	Technique	Number	
Master of Wine	In-depth Interview	2	
Market director (Asian)	In-depth Interview	1	
CEO of one of the wine media	In-depth Interview	2	
Project manager	In-depth Interview	2	

The semi-structured interviews have processed with several open questions, which allowed to have a rich discussion on one topic and carried out in-person flexibility (U. Flick, J. L. H. Foster, 2015). The seven participants are from different countries that include France, USA, and China. The interviews lasted for almost 30 to 40 minutes. Participants who were contacted have been informed of the purpose of the research and the estimated time required for conducting the interview.

#### A. Data Collection and Analysis

The primary data was collected through interviews. The interviews provided the experts' perspectives that offered a great reference value to the study. Due to the social restrictions of the Covid-19 crisis influence, the interviews were conducted by using virtual meetings through Google Meeting, Zoom, Skype, WeChat, and Microsoft Teams, which instead of face-to-face meetings and more safety. The interviews were all semi-structured and open-ended. The interview protocols were considered and used for interviewees, who were allowed to express their experiences and thoughts sufficiently.

Thematic analysis with manual coding was used for the semi-structured interviews. NVivo is the preferred software for thematic analysis with manual coding. Office 365 includes Microsoft Word and Microsoft Excel was used for transcribing, analyzing, and coding the data manually. Moreover, since thematic analysis is one of the main methods of analyzing qualitative data, the qualitative findings of the responses in this study acquired through data collection are analyzed and interpreted in this chapter which defers to Braun and Clarke's six phases (B. Virginia, C. Victoria, 2016).

#### ➤ 1<sup>st</sup> Phase – Familiarization

The first phase of the thematic analysis is transcription and familiarization with all the data collected. An edited transcription method was used, seven interviews were transcribed into MS Word, and open coding was performed that analyzed the textual content. Each interview transcript has been reviewed and examined several times to ensure a comprehensive understanding of content and line-by-line coding which is important to build concepts and categories (S. Khandkar, 2012).



Fig 3 Representation of Transcription

#### ➤ 2<sup>nd</sup> Phase – Open Coding

At this stage, open coding has been conducted. Words, phrases, or sentences were highlighted, and shorthand labels or "codes" were used to describe the content. At this stage, "In vivo codes" which means coding by the words that participants used in the interview, was performed first to label the important information from the content, the name of the labels was taken from the content, then coding the text with the common characteristics and separated to groups, constructed codes was carried out that assign concise labels that created by researcher to significant pieces of information (B. Glaser, A. Strauss, 1967). The detailed transformation process was recorded in the following Fig. 4.

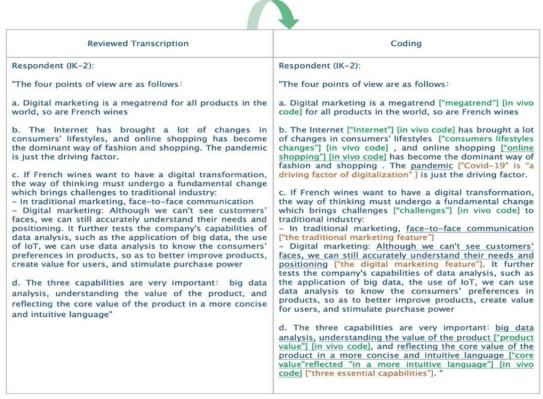


Fig 4 Open Coding Example

#### ➤ 3<sup>rd</sup> Phase – Themes Identification

The codes that have been created identified the patterns of content and started coming up with themes. In this stage, potential themes were created to help the researcher better analyze the purpose of the data.

Codes	Theme
Megatrend     The Internet     Consumers' lifstyles changes     Online Shopping     Covid-19	Digitalization is the megatrend
The traditional marketing feature The digital marketing feature	Challenges the companies have to face
Big data analysis, Product value "Core value"reflected "in a more intuitive language"  ***The state of the s	Essential capabilities for companies

Fig 5 Themes Identification Example

## $\triangleright$ 4<sup>th</sup> Phase – Reviewing Themes

In this stage, the themes have to be ensured that they were useful and accurate enough to represent data. First, return to the data set and evaluate the themes that have been settled. Then, it is important to determine whether there were problems with the themes, whether the understanding of the data was adequate, the in-time corrections were necessary if there have some problems or uncertain issues. Finally, repeated evaluations and examination of the themes, ensure each theme was unerring and had sufficient data supported.

#### > 5<sup>th</sup> Phase – Defining Themes

After the final list of themes was ensured, defining and naming themes was conducted in time, which was figured out with a succinct and easily comprehensible name, and a detailed analysis was conducted to identify the subject of each theme and its significance (B. Virginia, C. Victoria, 2016). The final stage for defining the themes as an example is represented in Fig. 6.

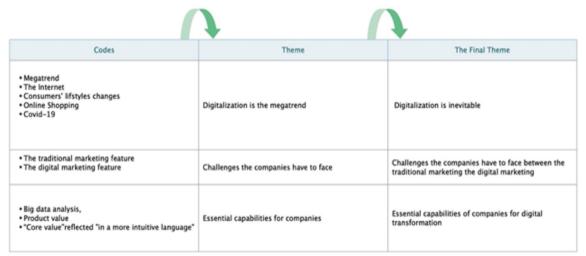


Fig 6 The Example of Defining Themes

## ► 6<sup>th</sup> Phase – Findings

The aim of this phase is to write the thematic analysis to convey the validity and merit of the complicated data set collected from participants (B. Virginia, C. Victoria, 2016). A concise, convictive, and logical statement was unfolded in this phase.

#### Identified Themes and Codes

Identified themes and codes summarized from the data set of all the responses to the questions. The pattern has been created to elaborate all the responses into different themes as Fig. 7. shows below:

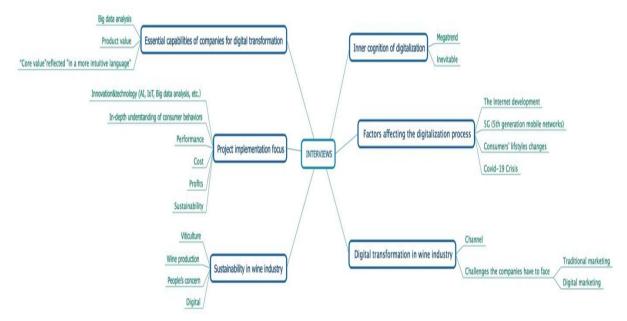


Fig 7 Identified Themes and Codes

Different participants had a special code number in order to be identified and defined easily. The seven participants' information and marked regulation were noted in the table below (Table. 2).

Table 3 A Special Code of Seven Participants

NAME (abbreviate)	JOB POSITION	YEARS OF EXPEREIENCE	INTERVIEW NUMBER	CODE
С	CEO of a wine media (Aisa)	15	1	IC-1
К	Project Manager	13	2	IK-2
J	Master of Wine	20	3	IJ−3
z	Wine News Writer	15	4	IZ-4
С	Project Manager	10	5	IC-5
N	CEO of a wine media (France)	12	6	IN-6
Υ	Market director (Asian)	15	7	IY-7

#### • Interpretation of Findings

After determining the identified themes and codes, the interpretation of the findings was stated as follows:

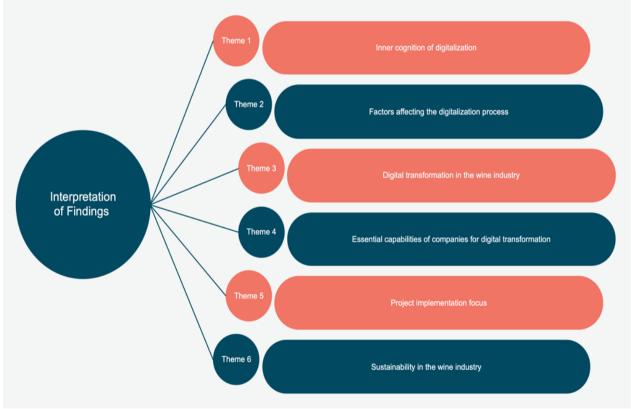


Fig 8 Interpretation of Findings

## ✓ Theme 1: Inner Cognition Of Digitalization

As the internet is developing very rapidly, 5G technology has been used in various fields, and people's lives can no longer be separated from the use of the Internet. The in-depth semi-structured interviews have revealed the experts' inner perception of the digitalization process.

All of the seven participants believed that digitalization is the megatrend, it is certainly inevitable and has been covering various fields and become one of the significant links in the project management evolution process. IC-1 who is the CEO of a wine media company, stated that the development of the digital market is becoming more and more mature, for example, Douyin, Kuaishou, and some WeChat applets in China has been already the main way of marketing communication.

"Actually, I would say that the main way of marketing communication in China now is digital marketing. Especially due to covid-19 crisis, people's social activities are greatly restricted. Consumers spend significantly more time using mobile phones, especially using Douyin, WeChat, and watching short videos, meanwhile, people are more inclined to online shopping, a convenient and safe way of consumption (avoiding face-to-face contact), 'live streaming e-commerce' has become a very popular marketing communication method in these years. For the wine market, although it is a traditional industry, due to the general trend of digitalization, which means wine companies should focus on the development of the digital market, as well as the operation and project management in digital ways."

IK-2 and IC-5 are all project managers, and they agreed that digitalization is now a very important application in project management, which greatly improves operational efficiency and project performance, big data analysis, and artificial intelligence technology would surely become more and more popular in project management. However, IK-2 and IJ-3 reported that many challenges the companies have to face for digital transformation in the wine area though it is a megatrend, for example, the capability of data analysis, the channels change from B2B to B2C and the deep understanding of consumer behaviors. IZ-4 stated that:

"Well, in recent years, due to the epidemic and the unstable international situation, more and more news in the wine industry is related to sustainable development, digitalization, and investment. Both sustainability and digitalization are inexorable trends. In an unstable and changeable environment, either organizations or consumers, are more emphasis on value and value creation."

The value creation IZ-4 mentioned shows another dimension that digitalization can become a certain trend as it helps enterprises to achieve value creation to a large extent.

## ✓ Theme 2: Factors Affecting the Digitalization Process

The digitalization process has been an important influencing factor for sustainable project management evolution. Therefore, it is imperative to understand the elements of the digitalization process. From the responses of the seven participants, we summarize the main factors that influence the digitalization process and the necessary for digital development in the wine industry.

## • Responses from IK-2 State that:

"People's lives are now inseparable from the Internet. The rapid development of the Internet has brought people's lives into the digital age. The birth of 5G (5th generation mobile networks) has accelerated the process of people's digital life, such as the application of AI (artificial intelligence), big data analysis, the birth of IoT technology. However, with the development of the Internet and the birth of innovative high-tech technologies, various industries are undergoing digital transformation, which is an inevitable trend. People's lives have also become more convenient because of these high-tech digital technologies, for example, the appearance of the IoT (Internet of Things) has enabled household appliances to be connected together, sense each other, and can be utilized simply and conveniently with remote operation..."

Not only IK-2 mentioned high-tech digital technologies, but also IY-7 and IC-5 talked about AI and IoT technology. Due to the digital high-tech digital technologies, people's lifestyles have also changed. For example, people nowadays are more accustomed to daily habits and customs such as voice-controlled household appliances, online shopping, takeaway, bicycle sharing, etc.

Meanwhile, all seven participants mentioned the Covid-19 crisis to varying degrees, with two of them – IN-6 and IK-2 mentioning the most frequently. According to IN-6:

"Absolutely, I would say, the Covid-19 crisis brought a lot of challenges to human beings and hindered the development of whole society around the world. Actually it. Is the third year of the epidemic outbreak. Moreover, the epidemic is still coexisting with humans so far. Although the development of vaccines has greatly reduced the mortality rate of the infesters, it still greatly impacts international trade and people's social interactions. People are also paying more attention to health. However, the Covid-19 crisis has acted as a catalyst for the digitalization process. People are forced to accept contactless communication and lifestyle. They always work from home, conduct virtual meetings, more is to control the projects through the Internet."

#### • *IK-2 Stated that:*

"The epidemic has made live streaming e-commerce and contactless services popular. People are forced to work from home. The companies are more focused on digital marketing rather than the previous traditional marketing model. Big data analysis can quickly and accurately analyze consumer groups and can automatically recommend

appropriate products to consumers according to their preferences. Although the digital market is relatively common in China, the epidemic has indeed accelerated the process of digitalization for sure!"

Therefore, the main factors that spur the digitalization process can be summarized as follows: the internet's rapid development, the 5G era, Consumers' lifestyle changes, and the Covid-19 crisis.

## ✓ Theme 3: Digital Transformation in the Wine Industry

Although nowadays many wineries in France have already carried out digital transformation or have had the stream of consciousness of digitalization, the new business and management ways implied several challenges and difficulties the French wineries have to face.

IK-2 responded that digitalization enables wineries to focus on the evolution of channels, markets, and internal and external management systems, which is a great challenge for wineries. IY-7 expressed that although digitalization should be an inevitable trend, French wineries need much more time to adapt and develop. According to IY-7:

"Absolutely, digital transformation is to be imperative. But, I would say, we have to know, the wine industry is a traditional industry with a hundred of history, and many wineries are still family business, so digitalization is an emerging product for them although they are fully aware that digitalization is an inevitable trend and can make them more profitable. It means that they need more time to do this kind of thing, as it is still in the initial stage. Of course, this does not mean that it is the case for all wineries in France. There is no doubt that many large wineries have begun to develop rapidly in this regard and have achieved certain results."

IK-2 also explained one of the critical challenges that wineries have to face in the market area is the difference between the traditional market and the digital market. According to IK-2:

"... if French wineries want to have a digital transformation, the way of thinking must undergo a fundamental change which brings challenges to traditional industry, for example, in traditional marketing, it should be face-to-face communication, however, in digital marketing, although we can't see customers' face, we can still accurately understand their needs and positioning. It further tests the company's capabilities of data analysis, such as the application of big data, and the use of IoT, we can use data analysis to know the consumers' preferences in products, so as to better improve products, create value for users, and stimulate purchase power."

IJ-3 and IN-6 mentioned that the difference between traditional channels and digital channels is the challenge wineries have to face. Due to the distinct market, the change of channels is also inevitable. Although B2B still occupies a dominant position at present, the traditional supply chain

from wineries to négociant then to importers and finally to consumers still occupies a relatively dominant position, but the influence of digitalization makes wineries pay more attention to the transformation and development of B2C. IC-1 also explained the importance of transforming from B2B to B2C, and he believed although it should have a lot of challenges, B2C would play a significant role in the following years.

## ✓ Theme 4: Essential Capabilities of Companies for Digital Transformation

Seven participants shared their views on the necessary capabilities for companies to undertake digital transformation.

IK-2 and IZ-4 responded that big data analysis and reflection of product value would be the two main capabilities the companies have to develop nowadays. According to IZ-4:

"Well, actually, I would say, if the company wants to take digital transformation, many capabilities it should have the first, such as the high-tech management system, big data analysis, and how to reflect product core value in a more intuitive language. In short, I think, big data analysis capability is very necessary, because it should be the foundation of digital development. Then, I want to say value creation. Innovation is very important. Digitalization requires more innovation and technology, which means higher investment costs in R&D. Therefore, it is very important that the products have a high core value that can be accurately and fully understood and recognized by consumers."

IC-5 stated the importance of product value, according to IC-5:

"... as you know, consumers nowadays are increasingly concerned about the value of products. The product value includes its practical value and added value, the added value that consumers prefer such as after-sales service, logistics speed, whether delivery costs have been included, and so on."

Otherwise, IJ-3 and IY-7 mentioned that digital marketing offers a great stage where companies can keep in touch with consumers directly. Through big data analysis, companies can obtain consumers' information very accurately and very soon, such as preferences, and consumers' locations. Consumers can also learn about the history and development of the winery through some short videos. During the epidemic, many wineries also launched "cloud tasting", which means an online wine-tasting event. IY-7 stated that:

"... in addition to the big data analysis capabilities, wineries have to understand how to use an intuitive and easy-to-understand language and methods that consumers like to achieve effective communications in order to for clout."

Although the seven participants freely expressed their views, it is not hard to see there were many similarities. All in all, their opinions about the essential capabilities that companies have to have for digital transformation can be summarized as the following three points: big data analysis, product value, and reflection of products' core value in a more intuitive language.

## ✓ Theme 5: Project Implementation Focus

Since the seven participants are veterans in various positions related to the wine field, they are also managing and supervising multiple projects. The questions related to project implementation focus acquired sufficient answers and a professional perspective.

IC-1 and IN-6 are CEOs of a media company in Asia, they responded that cost, profit, and stakeholders' benefits, social influence are the factors they always consider about. According to IN-6:

"You know, when we take a new project, we are first thinking about the costs, we have to keep the cost as low as possible, and we will focus on the benefits that the new projects can bring to us and to all stakeholders. We are business, you know. Absolutely, social influence is very important too. We are a media company, our activities, our decisions will spread very soon."

IK-2 and IC-5 are project managers, they illustrated some of the projects they are working on now. Responded from IK-2:

"We are now working on some projects related to sustainability, although they are not in the wine field, I believe many things are in common. In addition to the three elements that project managers usually consider, which are cost, quality, and delivery time, the thing we are now thinking most highly of is innovation and technology such as AI, IoT, and so on. Although you may ask, the cost of hightech should certainly be high, it brings us many tangible and intangible benefits. For example, high performance, high environmental protection, the profits are not necessarily less, but could be more."

## ■ The Response from IJ-3 is Related More to the Wine Area:

"There are many projects of viticulture. Some areas already used AI technology to monitor various indicators of the vineyard, such as temperature, moderation, weather conditions, and so on. Of course, we have to consider cost, and performance as well. In the meantime, sustainability is another thing we have to think about, because, you know, green and organic viticulture is the goal that almost all the wineries pursue."

IZ-4 and IY-7 talked more about the market. They had a growing consensus of opinion on this issue. However, IZ-4 emphasized that the successful implementation of the project is inseparable from the needs of the market, while IY-7 is more inclined to emphasize the reaction-formation

of the accurate understanding of the market to successful project implementation. According to IZ-4:

"... as you know in the market, we have to understand what consumers like, what are they preference. The successful projects that we are implementing in the market, will satisfy the consumers' need for maximum, no matter what we will have, a publicity, an event, or a new product launch."

#### • *However, the Response from IY-7:*

"My work is related to the market field, and the projects in my hands are also related to the market. What I have to say here is that the status of the consumer is paramount. We cannot ignore the importance of the market to whether our company can operate well. Consumer recognition, which is what we usually call 'word of mouth' or 'reputation', has become a critical factor in building the company's brand and even the corporate culture. Therefore, the success of the project first requires us to have sufficient understanding and cognition of the market, and a deep understanding of consumer behavior and preferences, which is of great help for us to implement the project successfully."

Therefore, the views can be concluded that a successful implementation of projects focuses on not only cost, profits, and performance as usual, but also innovation& technology, sustainability, and an in-depth understanding of consumer behaviors. Innovation& technology which include AI, IoT, big data analysis, and other high-tech. moreover, there is no doubt that sustainability is a world concern. Especially under the influence of the Covid-19 crisis and the upheaval of the international social economic environment, sustainability is the goal of all of the world.

## ✓ Theme 6: Sustainability in the Wine Industry

Sustainability is now one of the goals pursued by all industries, including the wine industry. IJ-3 highlighted that there are several fields in the wine industry implementing many projects with sustainable subjects. In the word of IJ-3:

"There is no doubt that the theme of sustainable development is now also the philosophy pursued by the wine industry. We can roughly divide it into several areas such as vineyard planting and management, wine production, and the internal management of the winery. First, we can talk about viticulture. Now the wineries are promoting green and organic viticulture and have the certificate of green organic planting issued by the government, with the concept of reflecting "terroir". The organic cultivation of the land, the reuse of wastewater, and the reduction of carbon dioxide sustainability-themed are all implemented by the winery today. Then, there are also many projects on sustainable subjects in winemaking, such as natural wine, which is produced without the use of pesticides or herbicides and with few or no additives. You know nature wine, right? It is very popular today. Finally, I think you have seen that music reverberates in many cellars to make only a few employees feel happier and work better,

although the owner usually says that music is played because the wine will be tasted better because to enjoy the music. Besides, the green initiative label and bottles are all projects with sustainability themes, not to mention one by one here."

IY-7, IK-2, and IZ-4 expressed that digital technology has been used for viticulture, but for some small wineries which are family businesses, are still adhering to traditional methods. However, they still insist on green viticulture and reflection of 'terroir'. The representative region is Burgundy.

• IN-6 also Mentioned that More and More Sustainability Themes are Implemented in Wineries. IK-2 Stated that Digital Transformation also Contributes to Sustainability, According to IK-2:

"... digitalization promotes sustainability. First, we know that digital is paperless. Traditional marketing will use paper things, as well as over-delivery and waste resources. Digitization relies heavily on online analysis, is accurate, and avoids resource waste. Then, accessibility breaks through geographical restrictions. Digital marketing resists cultural diversity, which allows more people to come into contact with the concept of sustainable development. Finally, in the past, it took a lot of time for people to accept new concepts and cases. Now there are many small videos and pictures, spreading very fast through the internet, which enables people to obtain the latest news and ideas in a time no matter where they are, with a more comprehensive understanding and high credibility."

#### > Ethical Consideration:

Research ethics provides guidelines for conducting research, which is important to adhere to ethical principles in order to protect the dignity, rights, and welfare of research participants (Mark. I, 2015) (World Health Organization, 2020). As epidemics and natural disasters are arising frequently, the Covid-19 crisis has had a great impact on people's lives and social development. In order to better cope with the epidemic, natural disasters, and sudden violent events, this study adheres to the concept of safety, health law-abiding, and compliance. Interviews was conducted online instead of face-to-face during the Covid-19 crisis. The initial contacts with participants through email, including descriptions of research topics, procedures, data collection, and relevant detailed information, all processes in accordance with the ethical guidelines. All the participants' information was kept confidential, and they were allowed to withdraw from the study at any time which follows the General Data Protection Regulation (ICO, 2018).

All sources of ideas and beliefs and the names of the wineries and companies which made contributions to this study are acknowledged. Moreover, no manipulation was carried out on the data source in this study, and there is guaranteed that the data presented in this study is without manipulation or bias.

## IV. RESULTS AND DISCUSSION

The findings reflected the inevitable trend of digitalization in sustainable project management. All the participants mentioned the critical role of innovation and technology. The proposal of SDGs has made all industries in the world begin to comply with sustainable development, and so does the wine industry. Under the premise of SDGs, social, economic, and environmental are the key points to be considered during the formulation of the project in the wine industry. Meanwhile, innovation and technology are also very important, and they are the boosters that drive these three key elements. As we all know, the 5G era is the mainstream today. SDGs have also repeatedly mentioned the critical role of innovation and technology in social development and sustainable development. More and more industries are now developing innovation and high technology as the significant productive force to gain a competitive advantage. Therefore, digitization has become the most prominent product of the 5G era, and it is also the trend of all industries' development under the guidance of innovation and technology, in addition, it has also made great contributions to sustainable project management at the same time. Moreover, sustainability and digitalization were considered in the context of the strategic management of wine cooperatives (B. Richter, J. Hanf, 2021).

Both innovation and digitalization impact value creation and overlap all industries' economic sectors (O.K. Cristina, et al., 2022). Many studies have been working on how to develop and sustain a company's competitive advantage, which is the soul of Porter's value chain (M. Porter, 1979). Furthermore, multidimensional value such as economic, social, cultural, and environmental is advocated (A. Carlos, Z. Aurora, 2022). To identify how much value the project and project management creates, the measurement method of ISPM is mainly reflected in three aspects of value creation as Fig. 9 shows below: value to employees, value to top management, and value to customers.



Fig 9 Value Creation Circle

The finding from interviews reflected that due to the COVID-19 pandemic since March 2020, employees from all over the world had to face the same situation: work from home. People's lives and social interactions have been

severely negatively affected. Due to the epidemic prevention measures around the world, employees working from home had become the normal, which accompanied by great resignation. The situation makes people have to rethink their original life and work, and a new dimension has emerged in their understanding of personal value (W. Jackie, 2022). The findings from this paper showed that employees cared more about their existence and value in the firm. The depression of the company's business and the untimely communication of information made employees feel anxious. The findings of the project managers who were interviewed believed that innovation and advanced technology utilization could greatly improve productivity, and through certain training, employees would work more efficiently. New concepts could make employees more passionate and make them feel self-worth. Therefore, safety, comfort, and convenience of the working environment can all affect the employees' status which must have an impact on productivity and work efficiency.

Moreover, effective recruitment in order to ensure the employees with appropriate skills and needs to complete tasks efficiently, which will make employees feel full of self-realization. The findings showed that COVID-19 has made employees question the employment rate and felt anxious about the status of working from home. Although this state did not last for a long time, and it is the postepidemic period now, the uncertainty of the environment makes us still have to deal with the occurrence and management of the situation of employees working remotely. The findings reflected that new concepts and technology could make employees excited. Moreover, resource allocation is significant for the project team, employees will be conscious of their self-worth and selfrespect. Furthermore, charismatic leadership and project teams could build on a sense of belonging and an efficient workforce, which creates a sense of responsibility, security, and belonging to employees.

The findings of this study showed that top management is one of the key participants in sustainable project management because suggestions from senior management will affect the winery's development. An entrepreneur is an individual who creates a new business, facing most of the risks and enjoying most of the rewards, in other words, the entrepreneur is commonly seen as an innovator, a source of new ideas, goods, services, and business/or procedures (H. Adam, 2022). Moreover, from a business perspective, Stefan stated that value would be created when a company earns a return on capital (revenue) that exceeds initial capital (F. D. Stefan, 2022), thus, sustainable project management will help top management for sustainable value creation through value-adding activities. Top management is expected to address capital wealth, and earnings growth, and maintain maintained company's stable and sound development nowadays. The characteristics of top management that have been discovered through the findings were the courage of innovation, the grasp of opportunity, the insight of human resources, the spirit of risk response, and supernatural powers and abilities. The senior managers who appeared in the findings believed that the project management methods led by innovation and sustainability could help them and attract more business and investment opportunities, improve the overall competitive advantage of the organization, and greatly enhance the social influence of both individuals and organizations. Overall, the ISPM model, by strengthening the importance of innovation and technology in project management, top management has achieved more value creation according to findings, there were three main aspects concluded: business and investment opportunities, competitive advantages of the company's operation, and significant social influence.

Customer value creation is embodied in increasing customer satisfaction and the customer experience (M. Gautam, 2020). It is important for the project team to create added value at each stage in order to contribute to the end user's experience, in other words, project managers have to know how to make value creation through activities that provide more value on tangible or intangible products and services to customers. The findings reflected the irreplaceable important role of innovation and technology in sustainable project management. It was obviously identified from findings that the digital market could help organizations get to know the feedback from customers on performance effectively. The rise of digital technologies such as AI, IoT, etc., are generating novel opportunities for companies to create additional value for their customers through a proactive approach, which can manage uncertainty, improve cost efficiency and increase revenue for organizations (A. Josef, R. Wiebke, 2022). Innovation and technology that have been used in project management in the wine industry, which can accurately and quickly obtain the needs of consumers who can acquaint every link of the winery from planting, production, brewing, storage, and transportation through the digital marketing models, project management implementation process of the winery can stride over different regions and time zone. The findings stated that digital marketing has become very popular nowadays which would be a priority that French wineries have to develop. The epidemic has promoted the development of digitalization to a certain extent. It has a great improvement in company responsiveness and transparency, for example, TikTok internet celebrity lives broadcast room, which carries goods in various forms, introduces and tries products through video, answers customers' questions in a timely manner, and provides various promotions and concessions. In terms of logistics, it will provide carefree in 7 days, which greatly promotes customers' purchasing power. It is obviously that, the interviewed experts all paid great attention to the digital operation and the development of the digital market, and they believed that it would be an inevitable trend in the French wine industry.

In conclusion, the convenience and reliability of consumers' access to obtain resources, the simplicity and safety of purchasing products, and the efficiency and authenticity of the organization's management and service connection, are all creating value for customers. The importance of digital management to organizations, and the critical role of digital markets and distributions through

technique methods, the improvement of sustainable consumption, which fully reflect the strategic targets of SDGs.

Meanwhile, the findings from this study reflected that the projects implemented in the French wine industry were concerned with "time", "cost", and "scope" as the basic goals with a high-quality expectations. There is no doubt that these three elements are the most basic goals for traditional project implementation, and will not be easily changed, and they are also the cornerstones of project management. Therefore, the project's plan should be considered to the greatest extent of the sustainability concept. Moreover, combined with the data from interviews, the findings showed that the French wine industry had an increasingly important position in international trade, and the digital transformation of channels would be their key objective that develops temporarily and future. At the same time, the formulation of the projects and project management also needs to consider political factors. It is mainly due to the fact that the political environment in the world today is not favorable, thus, the formulation of the project needs to consider the stability of the political and economy of the authorities, ensuring word of mouth and the smooth progress of international trade. Therefore, the findings of the interviews with project managers in this study embodied that project managers have to give full consideration to risk management, especially when the current social and economic environment is not stable.

In addition, the findings reflected that project managers attached great importance to vintage and storage conditions. A great vintage represents a higher quality of wine, and extremely strict storage conditions mean that the quality of wine can be guaranteed and even the value of wine can be appreciated. Therefore, the delivery design in the project management process is particularly important. The project managers have to attach great importance to better supervision and real-time monitoring of various indicators related to wine. According to Bonghez and Grigoroiu's study, since the overall perspective of project management, project management performance can be defined as two levels which are the operational level and strategic level, operational level focuses on the objective of groups and departments, and the strategic level pays attention to organization objectives (S. Bonghez, A. Grigoroiu, 2013). Therefore, the current project management should start from the integrity of the operation level and the organizational level at the same time.

Overall, since digitalization transformation is an essential process to achieve more value creation during the post-COVID-19 crisis nowadays. The digitally integrated project management system can be more efficient and faster. However, the findings showed that the information system in the high-tech field also requires higher knowledge and education level of employees. Shareholders' benefits should be considered as another important component as well which was reflected in the findings. In addition to dividends and the company's valuation, shareholders' interests were more concerned with their roles and influences in society

and business, especially in the current international environment, and it would also be more attentive to evaluate investment opportunities at the same time. Meanwhile, ISPM believes that the leadership determines the successful strategy formulation, and the deployment of the strategy will directly affect the success of the projects' implementation.

#### V. CONCLUSION

The study demonstrates the important role of innovation in the implementation of SPM through the thematic analysis method, and expounds on the necessity of utilizing ISPM as a new method of sustainable project management in the French wine industry. Moreover, the study gives the strategy on how to achieve value creation led by innovation and digitization, the ISPM value chain was unfolded and summarized in this study that based on three aspects "value to employees", "value to top management" and "value to customers" (Fig. 10).



Fig 10 ISPM Value Chain

The study not only has the practice contribution to the new sustainable project management method of the French wine industry but also has value in academic implications. The existing academic literature, by contrast, has not given enough attention to the dominant position of innovation in SPM in the wine industry. Latest previous studies regarding performance improvement, sustainable goals achievement, and sustainable project management implementation before the Covid-19 crisis in most economic and construction industries, and few studies in the initial phase of the influence of post-Covid 19 on sustainable project management evolution and implementation. There were even no studies involved on the importance attached to the innovation of sustainable project management and the unprecedented attention paid to value creation under the influence of the epidemic. Therefore, this study has different research findings which made a significant contribution to academic literature through a thematic analysis.

## Limitations

Although it has a detailed elaboration of thematic analysis, there are still some limitations in this study, which are summarized as follows:

- First, although the research samples were representative, the data were limited due to the limited number.
- Second, the study was conducted during the middle-late stages of the COVID-19 crisis, the findings of this study might not be generalizable when Covid-19 will have culminated completely and whether there will have other

- epidemics that will affect the development of sustainable project management. Therefore, the study has the indeterminacy of the period of time.
- Third, the French wine industry is deeply influenced by culture and policy, this study did not consider cultural factors too much, and did not break down the size and type of wineries in France.

Finally, this study mainly discussed the important position of innovation in SPM to help the French wine industry adapt to digital transformation and the embodiment of value creation in the ISPM model. However, due to space limitations, the comprehensive disposition and explanation of ISPM was not exhaustively appeared in this study

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