

REVOLUTIONIZING CIVIL SERVANT'S WORK BEHAVIOR THROUGH FLEXIBLE WORKING SPACES: DIGITAL TRANSFORMATION & GREEN PRACTICES AT THE MINISTRY OF FINANCE

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ABSTRACT

Introduction/Main Objectives: The COVID-19 pandemic forced the Ministry of Finance of the Republic of Indonesia to carry out a digital transformation by employing the concept of the Flexible Working Space (FWS) to ensure its civil servants can use the Work From Anywhere (WFA) system, including the Work From Home (WFH) system. These concepts are expected to help civil servants to optimize their performance. **Background Problems:** FWS has been practiced for two years, but detailed information on how the civil servants' green work behavior has helped in maintaining their performance has not been investigated. **Novelty:** The researchers also studied how the digital transformation has changed the working practices among civil servants at the Ministry of Finance, and do they employ more green practices now? Discussion about the civil servants' green work behavior during this digital transformation is still limited. **Research Methods:** This study applied a qualitative technique to analyze the data obtained from an online qualitative survey, focus group discussions (FGD), observations and documentation. These research data were validated through a triangulation approach before being analyzed using the theory of planned behavior (TPB). **Finding/Results:** The positive aspects of the Ministry of Finance's digital transformation, which occurred during the pandemic, are civil servants can work faster, more efficiently, more flexibly, and they are more focused, but they have less contact with other people. While the identified disadvantage is that the internet network is occasionally unstable, thus disrupting the learning and discussion processes. The civil servants at the Ministry of Finance had used several green practices before the pandemic began, such as saving water, saving electricity, and to some extent they had gone plasticless and paperless. After the pandemic happened and FWS was implemented, these practices became more prominent, producing better results compared to the results before the pandemic. The pandemic also brought other advantages, including carbon emissions reductions and time savings. **Conclusion:** The FWS concept in the Ministry of Finance changed the work behavior related to the digital transformation, and the green work behavior of the civil servants. This is based on the TPB which includes attitudes, subjective norms, and behavioral control. Digital transformation using the FWS concept has had positive and negative impacts on the civil servants' green work behavior, and in maintaining their performance.

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INTRODUCTION

The COVID-19 pandemic forced social change around the world. As a consequence, governments, including the Government of Indonesia, and numerous companies, have been forced to carry out digital transformations to ensure that work routines can run effectively and efficiently, despite being conducted remotely. This change, however, is no longer an option but a necessity, for the critical foundation of business success is now digital transformation. Digital technologies provide opportunities to improve the quality of products and services (Marushchak et al., 2021). According to studies conducted by McKinsey, who analyzed over 1,000 companies to see how they weathered the significant economic crisis, digital transformation is one of the three main critical phases organizations have to undergo to resolve the crisis, aside from having a survival mentality and an operational roadmap.

Although studies of digital transformations play an important role in an organization, this study has never been conducted within the Ministry of Finance of the Republic of Indonesia. In fact, digital transformations will encourage individuals to behave in a greener manner (Rowan et al., 2022). The adoption of sustainable green behavior in the post-pandemic era has the potential to bring numerous advantages, including environmental sustainability (Chatzistamoulou, 2023), increased productivity (Xin & Du, 2022), reduced pollution emissions (Li et al., 2023), increased efficiency (Li et al., 2023), and various other advantages. Therefore, the lack of research that links digital transformation and green practice behavior represents the gap that this study seeks to fill.

In reality, efforts to digitally transform businesses had been planned across many industries long before the pandemic began. However, the implementation was slow or non-existent. This

changed overnight because of the pandemic. According to McKinsey, the pandemic has helped companies to adopt digital transformations 20 to 25 times faster than expected. In addition, businesses implementing remote work can deliver work-related solutions 40 times faster than they could in pre-pandemic conditions. The results also show that employees' readiness to implement remote work takes only 11 days rather than one year (LaBerge et al., 2020). The pandemic represents an overly rapid transition to the digital landscape (Iivari et al., 2020).

Similar processes and efforts to accelerate digital transformations have also been identified in the Ministry of Finance. According to the Minister of Finance, Sri Mulyani, the pandemic provided the momentum to accelerate the Ministry of Finance's digital transformation, which allowed it to quickly adapt to the new work patterns. Before the pandemic, the Ministry of Finance had begun to design new digital-based internal work patterns and external services, based on a digital transformation with a three-year timeline. However, the timeline was changed completely to a matter of days when the pandemic occurred. The pandemic accelerated the implementation of the transformation and the adaptation (Nagel, 2020).

The Ministry of Finance, as a government agency, introduced the FWS concept as a way to adjust its operating system during the pandemic. FWS is the Ministry of Finance's interpretation of the Work From Anywhere (WFA) national policy plan for civil servants. The WFA system is also expected to be implemented by private companies and state-owned enterprises. WFA is a new type of remote work in which employees are given geographic flexibility (Choudhury et al., 2021).

This research notes several operational problems. First, at the beginning of the digital transformation phase, employees of the Ministry

of Finance experienced difficulties in adapting to the new, all-digital system. For example, all the meetings changed to online ones, the correspondence bureaucracy was replaced with a paperless system, and various other policies were put in place. Second, educating the public, as service users of the Ministry, required a great deal of effort. For example, explaining to taxpayers that they had to use the online system.

The FWS concept is stipulated in the Decree of the Minister of Finance Number 223/KMK.01/2020 concerning the Implementation of FWS within the Ministry of Finance. FWS maximizes the use of information and communication technology to increase and maintain the productivity of civil servants, and ensures the continuity of the implementation of tasks by providing flexibility for the work locations, for a certain period. The FWS concept was created to ensure civil servants can work effectively and efficiently while maintaining their focus on their tasks and functions.

To support and sustain the FWS concept, the Ministry of Finance launched a web-based app called *e-Kemenkeu*. The app is a collection of various information systems that support office automation at the Ministry of Finance. The app can be accessed using the Ministry of Finance's Single Identity Login. The application has accelerated business and bureaucratic processes, and has increased the civil servants' productivity (Kementerian Keuangan RI, 2019).

In addition to the above-mentioned advantages, FWS also has inadvertently changed the civil servants' work behavior, causing it to be greener and more environmentally friendly. This, in turn, has affected the environment

positively and significantly. According to Harvard Business Review (HBR) March 2022 data, dramatic changes in work patterns and mobility temporarily reduced global carbon

emissions in 2020 by 17%, compared to the data for 2019 (Shreedhar et al., 2022). This happened because WFA's implementation reduced work trips, leading to a decrease in emissions.

The FWS concept presents new challenges, such as how to observe and influence behaviors that are important to sustainability. However, detailed information about the green behavior of civil servants when working with the FWS system has not yet been provided. In addition, discussions about the role of civil servants in solving problems related to environmental issues are still limited. Therefore, this study explores the effectiveness of FWS on the performance of civil servants at the Ministry of Finance, and investigates green practices among civil servants during FWS.

To address this issue, this study applies the reasoning from the theory of planned behavior (Xie et al., 2017) to analyze changes in green behavior as a result of the digital transformation at the Ministry of Finance. Based on insights from this framework, the authors present a model based on the data processed, using the theory of planned behavior framework to predict the green work behavior patterns of employees of the Ministry of Finance in the future. This study analyzes the effectiveness of FWS on the performance of civil servants at the Ministry of Finance, and investigates green practices among the civil servants during FWS.

Flexible working spaces positively impact and significantly enhance worker performance (Kurniawan et al., 2024) while increasing their productivity (Voordt, 2003) and job satisfaction (Azizah & Wahyuningsih, 2020)

LITERATURE REVIEW

1. Digital Transformation

Implementing a digital transformation is challenging, because there are many obstacles in the way (Sang, 2020). One of them is because people usually prefer to stay in their comfort zone, especially when they are already familiar with a routine. There must be external forces to force people to change their ways. That is the reason why people were more likely to digitalize their behavior when the pandemic became more severe (Srisathan & Naruetharadhol, 2022). Responding to the pandemic, numerous companies have also taken a bolder approach to innovate in the post-pandemic era (Sorensen & Images, 2021). During the COVID-19 crisis, employers and employees had to try to create a more lenient system that could respond flexibly to new challenges (Brakman et al., 2020; Purnomo et al., 2022). New technologies have the ability to both favorably and negatively impact employment quality. Corporate executives must abandon their established approaches that emphasize the automation of employment (CIPD, 2020).

Given the negative effects the pandemic had on digital transformation, whether we like it or not, survival is critical, and even if businesses cannot operate normally, we must return the business sector to normalcy as soon as possible (Maritz, 2020). Because of the digital transformation, one can easily connect with his or her work while staying at home. However, one must be cautious when using technology (Kaushik & Guleria, 2020). One reason for implementing alternative work arrangements during a digital transformation is to give employees more flexibility to deal with heavy workloads (Hill et al., 2003). Employees who are already familiar with digital technologies will have an easier time implementing them (Kohnke, 2017).

Digital transformation necessitates three factors i.e. team collaboration and communication, team identification and workplace relationships, and team resilience and adaptability (Trenerry et al., 2021). These new digital capabilities have the potential to boost performance while also expanding the product, service, and consumer base (Verhoef et al., 2021). Digital transformation is considerably more than just technology; it necessitates a focus on people, as well as changes to the organizational strategy, structure, and processes (Hess et al., 2016).

Digital technologies are transforming the nature of work and the skills required to succeed in the workplace. A digital transformation explores the impact of these changes on job design, work organization, and employee behavior (Fréour et al., 2021). Digital transformation can lead to changes in communication patterns, collaboration, and work processes, which in turn can impact employees' motivation and job satisfaction (Davidescu et al., 2020). Several factors that can influence employee behavior include the nature of the digital technologies being adopted, the organizational culture (Leso et al., 2022), and the skills and training of the workforce (Blanka et al., 2022). There is a need for organizations to provide training and support for employees (Ployhart, 2015), the importance of communication and collaboration in digital workplaces, and the potential for digital technologies to enhance employee autonomy and flexibility (Okkonen et al., 2018 and Attaran et al., 2019). Digital transformation can have a significant impact on work behavior and organizational outcomes. As organizations continue to adopt digital technologies, it is important to consider the ways in which these changes can impact employees' motivation, job satisfaction, and overall well-being.

A digital transformation that allows employees of the Ministry of Finance to work with the Flexible Working Space system is described in the indicators used to create question items in this study. The development of these indicators is based on the theoretical framework of planned behavior. The indicators in this study are the implementation of a flexible working space using digital transformation, likes/dislikes or advantages/disadvantages in the use of various applications launched by the Ministry of Finance, the impact of a digital transformation, the policies and the implementation of the policies, the convenience, and the barriers to a digital transformation.

2. Green Practices

Over the past few decades, people's awareness regarding environmental issues has increased significantly. As a result, green practices have also become much more popular, not only among environmentalists but also among ordinary people that do not identify themselves as environmentalists (Karim et al., 2020). There are several definitions for green practices, depending on what the term is related to. Sánchez-Flores et al. (2020) define green practices as "environmentally friendly actions" that are beneficial to the protection of the environment and can support sustainable development. This definition is related to supply chain management. The term "environmentally friendly practices" also appears in a definition proposed by Das & Nayyar (2020) whose full definition is "Environmentally friendly practices in retail consumer usage and how they are perceived in a practical way." This definition is related to green marketing and business sustainability. A similar definition is also presented by Tzschentke et al. (2008), who define green practices as those conducted to protect the environment. Based on all three definitions, it can be concluded that

green practices are practices/activities/actions that do not harm the environment.

The definition is clear. Thus, anyone who wants to take part in protecting the environment can do anything within their capacity to participate, by adhering to the rule to do nothing that could harm the environment. In response to the increasing awareness and simple definition of green practices, many industries and fields in the world have launched numerous green programs to ensure their activities do not impact the environment negatively. For example, in the hospitality industry, hotels and restaurants around the world now pay more attention to their daily operations, to make them more environmentally friendly by launching green programs (Chan et al., 2014) such as reducing water consumption, installing appliances that are energy efficient, etc.

A study by Harvey et al. (2010) reports that employees appreciate working in environmentally friendly companies. However, although the awareness of the issue has increased, not everyone will want to willingly participate in such programs. There are also occasions when employees act indifferently toward green practices in their workplaces (Chan & Hawkins Rebecca, 2010). Thus, to ensure the success of the programs, the industry would need to make sure their employees take part in implementing green practices. This is because some studies found that the employees' intention to practice green behavior plays a crucial role in determining the success of the green programs (Chan et al., 2014; Karim et al., 2022). A similar concept also applies in other industries and fields, including in government sectors, in which the employees' involvement is important for the success of the green programs launched by the government.

Therefore, although anyone can participate, it is still important to determine the factors that

influence an employee's willingness to participate in environmentally friendly programs. This also applies in other industries and fields, including in government sectors, in which the civil servants' involvement is important for the success of the green programs launched by the Ministry of Finance. To identify the factors that influence the civil servants' intention, the theory of planned behavior (TPB) is employed, as it has been widely used by social scientists to study behavioral intentions (Fielding et al., 2008) with satisfactory results.

In this study, the green practices implemented within the Ministry of Finance are used to describe the indicators, which are later used to formulate the question items. These indicators are also prepared based on the theory of planned behavior. The indicators in this study are the implementation of green practices, their like/dislike or advantages/disadvantages, the policies and implementation of the policies, the level of convenience, and the barriers to the implementation of green practices.

3. The Theory of Planned Behavior

The theory of planned behavior (TPB), a well-known social psychological theory of human behavior, is critical in providing insight into this phenomenon. The TPB model is based on the premise that people decide to engage in specific behaviors (Srisathan & Naruetharadhol, 2022). The theory assumes that what a person does in a given context (a behavior) results in the formation of an intention to perform the behavior, and it is postulated that intentions reflect the three motivational influences (Ajzen, 1991). The TPB can be used throughout the development, implementation, and evaluation of behavioral interventions. According to the TPB model, people establish intentions to undertake a behavior depending on three variables (Ajzen,

2002). First, the indications are people's favorable and negative views toward digital transformations. Second, subjective norms might be revealed by how people see their digital transition. Finally, perceived behavioral control employs indicators of the major hurdles described by people in relation to difficult things, the difficulties that develop, as well as ideas and solutions from interviewees while implementing a digital transformation.

The TPB is rarely used in conjunction with qualitative research methods. The data collection and analysis methodologies developed for the TPB model are primarily quantitative (Ajzen et al., 2004). Nonetheless, in some circumstances, the choice for qualitative research methods is dictated by the type of data available (e.g., interviews), or the quantity of the cases available, which precludes the use of statistical approaches (Renzi & Klobas, 2008). Few published articles have used qualitative research methodologies with the TPB (Mynarska & Brzozowska, 2022), and there is little or no data on how the researcher arrived at the conclusions given. An explanatory model based on Ajzen's theory of planned behavior (Renzi, 2008) was used as the foundation for this research.

The interview outline was created using the TPB model, which was used for this investigation. Each aspect of the model, such as attitude, the subjective norm, and perceived behavioral control, was addressed with one or more questions (Renzi & Klobas, 2008). The study's interviewees were asked to express positive (or negative) feelings about digital change, in order to reveal their attitude to it. Subjective norms were identified by asking the interviewees how they felt about their digital transition. Perceived control variables were generated from questions about the key hurdles highlighted by the interviewees in terms of the difficulties, or

problems that developed, and ideas and solutions when implementing digital transformations. After that, the questions were divided into homogenous sections. The questions were separated into sections based on the projected length of the entire interview. The variables and indicators of the TPB are presented in Table 1.

METHOD, DATA, AND ANALYSIS

This research was conducted using a qualitative methodology. Qualitative methods are a series of interpretational techniques that describe, decode, translate, and interpret certain phenomena that occur naturally in the social world (Cooper & Schindler, 2014). Several steps were taken in this study: determining the research questions, determining the samples, processing and analyzing the data, and drawing conclusions. The first stage was to determine the research questions for the study. This study explored the effectiveness of FWS on the performance of civil

servants at the Ministry of Finance, and also investigated green practices among the civil servants during FWS. At this stage, we observed changes in the performance of civil servants at the Ministry of Finance, especially after the implementation of the FWS concept, which was reflected in their work behavior during the digital transformation, as well as in their green work behavior.

The second stage was to determine the research object. The sampling technique used was purposive sampling, namely by setting certain criteria. There were two criteria used in this study. First, the participants should be active civil servants at the Ministry of Finance of the Republic of Indonesia. Second, the participants must have worked at the Ministry of Finance before the pandemic began, so they understood the existing work culture. The profiles of the participants are listed in Table 2.

Table 1. Variables and Indicators of the TPB

Variable	Indicator	Literature
Attitude	Good/bad	(Garg & Joshi, 2018)
	Positive/negative	(Ozdemir et al., 2023)
	Pros and cons	(Vendemia & DeAndrea, 2021)
Subjective norm	Closest to think, encourage to	(Kristia et al., 2023)
	Social pressure, people normative expectation, community views, opinion	(Irawan & Hurriyati, 2021)
	Majority opinion	(Aji et al., 2020)
Perceived behavioral control	Having ability, resources, knowledge, and skill	(Peña-García et al., 2020)
	Ability to control	(Giandi et al., 2020)
	Perceived barriers or obstacles to performing a behavior	(Amanda & Marsasi, 2023)
Intention	Want to feel	(Semuel et al., 2019) (Giandi et al., 2020)
	Behavior	(Puspita et al., 2021)
Behavior	Activity	(Cui et al., 2023)
	Practical	(Cui et al., 2023)
	Action	(Xiong et al., 2022)

Table 2. Profiles of Participants

Initials	Gender	age	Office Location	Work Period
HEM	female	35	Bandar Lampung	15 years
TRA	male	37	Pangkalan Bun	15 years
AAP	male	36	Jember	14 years
TRI	female	34	Mojokerto	15 years
ZUN	female	45	Ngawi	26 years
IQL	female	24	Ngawi	4 years
AGH	female	32	Ngawi	8 years
FUZ	female	31	Ngawi	8 years
PRE	male	34	Sidoarjo	12 years
ADP	male	36	Sidoarjo	15 years
KPP	female	37	Sidoarjo	17 years
MAU	male	36	Sidoarjo	17 years
WTC	male	55	Sidoarjo	24 years
WIW	female	52	Sidoarjo	30 years
RAD	female	24	Sidoarjo	4 years
MKS	male	24	Sidoarjo	4 years
JBC	female	30	Sidoarjo	8 years
INA	female	30	Sidoarjo	8 years
WLF	female	29	Sidoarjo	8 years
GNP	male	30	Sidoarjo	8 years
PNB	male	30	Sidoarjo	8 years

The third stage in this research was the collection of the data. This was done by distributing questionnaires with open-ended questions to the civil servants, who answered and returned them. After the data were gathered, an online qualitative survey, focus group discussions (FGD), observations and documentation checks were carried out. Because the data collection was carried out during the pandemic, data were collected online using a digital platform. After this step, the collected data were reconfirmed during the FGD. This step was also conducted to obtain new and more in-depth information which did not get recorded in the online survey. The variables, indicators, and question items are presented in Table 3. Data mining was carried out in a structured manner, based on the list of questions that were compiled. In addition to the

FGD, research data were obtained through online observations and direct observation. Online observation by monitoring applications such as e-Kemenkeu (a collection of various information systems that support the office automation of Ministry of Finance employees) and Nadine (a web-based official manuscript management information system, using the internet to record, store, process and present official manuscript information within the Ministry of Finance which can be enhanced and updated features and bug fixing according to the needs of the user organization). Direct observations by visiting the Ministry of Finance's offices that implement green work behaviors well as viewing the relevant documentation such as civil servant performance documents, etc.

Table 3. Variables, Indicators, and Question Items

No	Variable	Indicator	Question items
1	Behavior toward green practices and Flexible Working Space	Do	How green practices and Flexible Working Space have been implemented?
2	Attitude toward green practices and Flexible Working Space	1. Like/dislike 2. Advantages/disadvantages	1. Like/dislike many apps, using paper, FWS 2. Advantages/disadvantages of many apps, using paper, FWS
3	Subjective norm toward green practices and Flexible Working Space	1. Policy 2. Colleague	How do policies on green practices and digital work affect the formation of norms in the Ministry of Finance? How do green practices and digital work colleagues at the Ministry of Finance influence the formation of norms?
4	Perceived control behavior toward green practices and Flexible Working Space	1. Convenience 2. There is no barrier	Is there any ease in carrying out green practices and Flexible Working Space? Are there any barriers to implementing green practices and Flexible Working Space?

Data validation in this study was conducted through triangulation, which consisted of three stages. The first stage involved interviews, observations, and documentation checks. The second stage saw 21 respondents fill out questionnaires. The third stage involved focus group discussions to validate the answers of the respondents. During the FGD, the results of the questionnaires were used as a guide to confirm the information the interviewees had provided in the questionnaires, and to add new relevant information. The results collected from the FGD formed the main source of data supporting the findings in this study, along with data from our observations and document research. Because this study used qualitative methods, the instrument in this study was the researcher.

The fourth stage was data processing and analysis. The data obtained were then processed using NVIVO software to help identify behavioral patterns. There are three stages of research used in qualitative data analysis (Sekaran & Bougie, 2016) including data reduction, data display, and the drawing of conclusions. The processes carried out in our study's data reduction were data selection, coding, and categorizing. The data were

displayed by presenting the data on a graph. In comparison, the conclusion was reached by analyzing the existing patterns of the phenomena that have been studied. The steps of this research are presented in Figure 1.

RESULT AND DISCUSSION

1. Digital Transformation

The COVID-19 pandemic forced the Ministry of Finance to rapidly adopt a digital transformation and new working practices. Changes in the work behavior of civil servants at the Ministry of Finance have occurred, along with changes in their attitudes, subjective norms, and perceived behavioral control (Renzi & Klobas, 2008). Attitude refers to an individual's overall evaluation of behavior, subjective norms refer to social pressure from others, and perceived behavioral control (PBC) refers to an individual's perception of his/her ability to perform the behavior. Kimathi & Zhang (2019) found that subjective norms significantly shape users' intentions to adopt e-learning in universities. Oh et al. (2022) found that PBC is a key determinant for the success of a digital transformation. By identifying the factors that influence employee

attitudes, subjective norms, and perceived behavioral control, organizations can design interventions to promote the desired work behavior and outcomes, the adoption of new digital technologies, and improved digital transformation outcomes. The results of data processing, developed using the theory of planned

behavior (TPB) to determine and classify the influence of attitude, subjective norms, and perceived behavioral control on the work behavior of civil servants during the digital transformation with the FWS concept, can be seen in Figure 2.

Figure 1. Stages of Data Analysis.

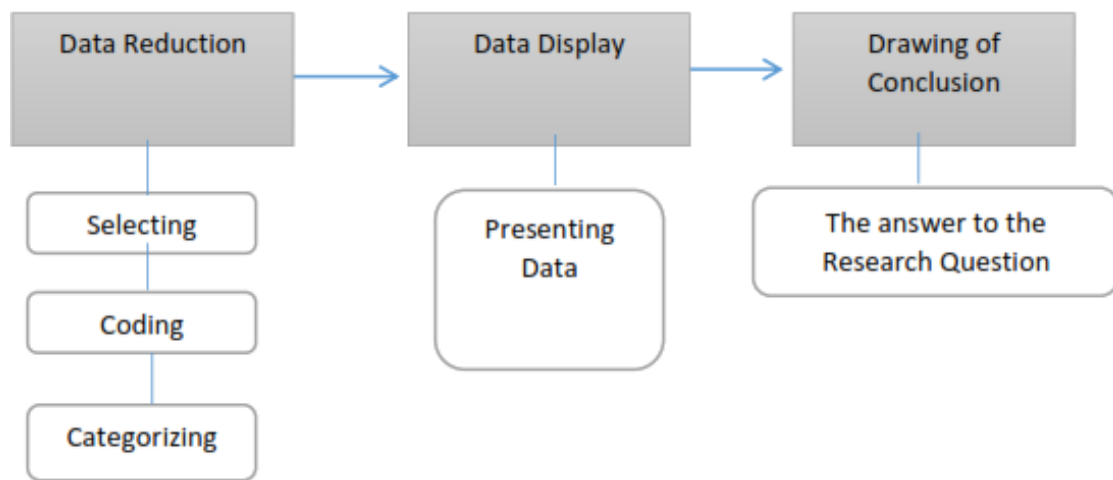
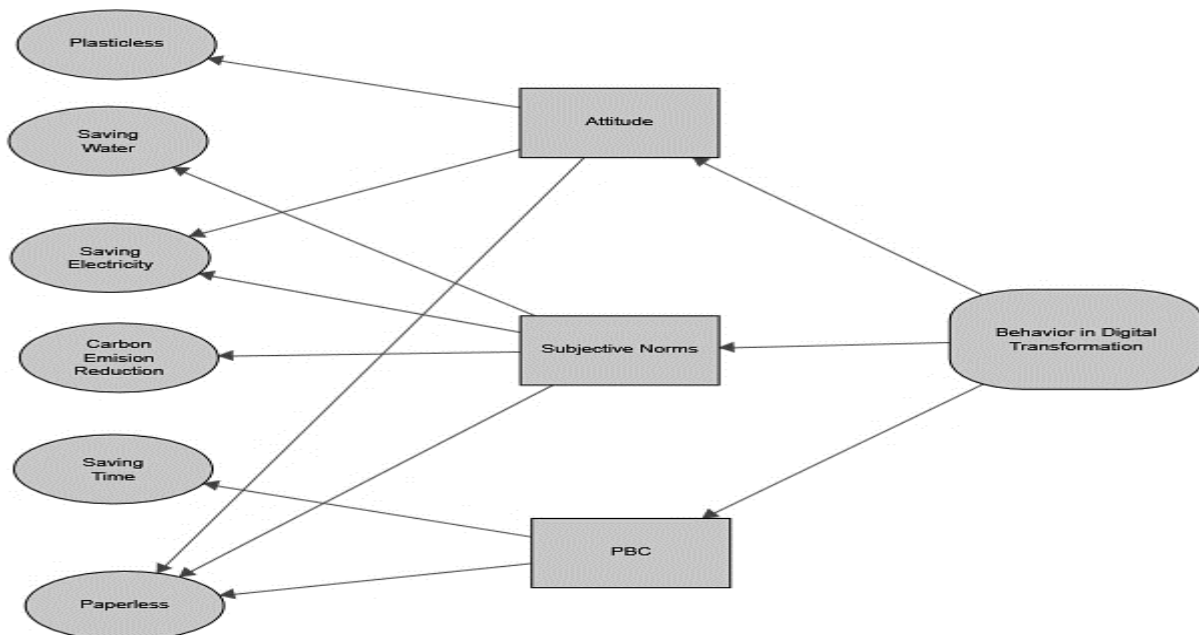


Figure 2. Conceptual Map of Civil Servants's Green Work Behavior.



The FWS concept depicted in Figure 2 illustrates the work behavior of the Ministry of Finance's civil servants during the digital transformation, classified by the influence of their attitudes, subjective norms, and perceived behavioral control (PBC). Figure 2 also reflects the green work behavior adopted by the Ministry of Finance's civil servants, including going plasticless, water saving, electricity saving, carbon emissions reductions, time savings, and paperless practices. The data shown in Figure 2 comes from the results of the data processing of the FGD involving the Ministry of Finance's civil servants, as listed in Table 1, supported by online observations (through monitoring of the relevant applications such as e-Kemenkeu, Nadine, etc.) and direct observations (through direct visits to Ministry of Finance offices related to green practices), as well as studying the relevant documentation (such as civil servant performance documents, etc.).

1.1. Attitude

An individual's positive or negative evaluation of specific behavior is referred to as his/her attitude. It is an important part of the theory of planned behavior (Limna et al., 2022). Attitudes indicate the extent to which the interviewees have an assessment (favorable and unfavorable) of behavior related to digital transformations.

Civil servants were forced to adapt to policies based on a digital transformation during the pandemic. The civil servants felt the change was difficult, and resisted it at the beginning of its implementation. This was expected to happen, as digital transformation strategies usually affect the entire organization and their implementation may result in resistance from various areas (Matt et al., 2015). Nonetheless, over time, the digital transformation made their job easier.

“(FWS). At first, it seemed like it was hard, right, but after some time, it made it is easier for us. When a change happens, there must be resistance. Yes, some refuse, like whether we want it or not” (FGD, May 22nd, 2022).

During the pandemic, the civil servants struggled at the beginning of the digital transformation's implementation, according to the FGD passage above. This reaction is prevalent when businesses face major changes, particularly when new technologies are implemented (Matt et al., 2015). However, the civil servants in this study discovered that the digital transformation actually made their tasks easier over time. This finding is consistent with research indicating that the successful implementation of digital transformation techniques can boost organizational efficiency and productivity (Fairoos et al., 2020). It should be highlighted that the resistance to change shown in this study may be attributable to factors other than a desire to accept new technologies, such as their potential impact on job security and workload (Safi et al., 2018). As a result, the Ministry of Finance must support effective communication and training initiatives to assist its staff to understand the intricacies of a digital transformation. Such initiatives can aid in a more seamless transition, and more favorable outcomes for individuals and the organization as a whole.

The digital transformation in the Ministry of Finance had positive and negative impacts. The positive and negative impacts of the digital transformation affected several factors, including the economy, the digital level, and the pandemic condition. The pandemic, without a doubt, has been the main driving force behind digital transformations (Subramaniam et al., 2021). According to the civil servants, the positive impacts of the digital transformation have outweighed the negative impacts. The positive

impact during WFH was that they could complete their work more quickly. They also felt they had more flexibility in their work, because they did not have to work in their offices. This is in line with a study by Rachmawati et al. (2021), who reported that those working remotely feel that the new working mode has allowed them to work more efficiently, flexibly, and faster.

“We feel there are more positive impacts than negative impacts. The positive side of WFH is work can be done more quickly and with more flexibility, without having to meet directly with taxpayers. A drawback of FWS is related to the internet network, which is not always stable” (FGD, May 22nd, 2022).

Nonetheless, there were also some negative impacts of WFH that the civil servants experienced. One of the prominent consequences of WFH was online meetings. As reported by the civil servants, online meetings were not as effective as offline meetings. The participants felt that it was harder to understand and follow the topics discussed in the meeting, especially during training. Online learning is a challenging task to the participants' motivation, and their ability to understand the material can be lower, there is also insufficient equipment to support learning, and internet connection is poor (Mantik et al., 2022; Rinto et al., 2020).

“What is clear is that from the negative side, it is not harmful. The problem with WFH is that the internet network is less than stable, because it is influenced by the speed of internet access in their respective places. Sometimes it is also difficult to connect a VPN if many people are accessing it. In addition, communication, especially when coordinating work, is also sometimes problematic. In my opinion, to work, especially during training, there must be two options, online and offline. Online meetings or training are more practical and can be accessed whenever and wherever while doing other things. They are more effective and

efficient but are hampered by unstable connections. However, for training (especially if conditions allow), it is better to do it offline, so that it is more focused and can be practiced directly”(FGD, May 22nd, 2022).

Employees in the public sector are required to keep their distance during the pandemic (Voorhees et al., 2020; Kultsum et al., 2022). Civil servants found it challenging to serve taxpayers directly during the pandemic.

“From a job perspective, WFH in the FWS concept is suitable for us as civil servants of the Ministry of Finance. For example, if taxpayers cannot meet in person, they can meet online. The problem is that sometimes when we make direct visits, it is difficult” (FGD, May 22nd, 2022).

The observation shows that the Ministry of Finance implemented a reservation system for face-to-face tax services during the pandemic. Taxpayers could make reservations by visiting the website page kunjung.pajak.go.id. This system limited the number of visitors and visiting times per day.

Another policy has been tax services in the form of electronic tax service applications, such as M-Pajak, which allow taxpayers to receive more personalized services virtually. The M-Pajak application has several features that taxpayers can use, including the e-billing menu, a digital taxpayer identification number (known as NPWP) card, information on the nearest tax office (known as KPP), reminders for tax payments and reporting deadlines, and information on the latest tax regulations. The policy of serving taxpayers virtually was expected to reduce the risk of COVID-19 transmission. Several studies have shown that digital tools and technologies can facilitate the provision of public services during a pandemic (Tregua et al., 2021; Whitelaw et al., 2020). For example, digital platforms can be used to provide public services virtually, and reduce the need for

in-person meetings. Such apps allow civil servants to communicate with taxpayers more efficiently and deliver essential services to them while minimizing face-to-face interactions. Some sources suggest that WFH policies related to e-service provisions have proven effective in reducing the spread of COVID-19 (Aspan, 2021) and ensuring business continuity (Baykal, 2022).

Attitudes play an important role in determining how individuals perceive digital transformation in their workplace. In this study, the civil servants initially had a negative attitude toward the digital transformation policies, such as being forced to adapt, and finding it harder to understand online meetings and training. However, over time, they adapted and felt that it made their work easier, enabling them to complete their work faster and more efficiently, while also providing greater flexibility. The positive impacts of the digital transformation outweighed the negative impacts, especially in terms of work efficiency and flexibility.

1.2. Subjective Norm

Subjective norms are defined as the effects of external factors and refer to a significant individual or group referent who provides approval or disapproval for engaging in a behavior (Siripipatthanakul et al., 2022). Behavior related to the subjective norm is in the form of a resourceful person's work behavior that comes from self-motivation, or because of the influence of others when carrying out the FWS concept based on the digital transformation. One of the digital transformation's facilities at the Ministry of Finance, which supports WFA office automation, provides a single login work application (e-Kemenkeu) that is safe to access anywhere and anytime.

“There are many applications that work in the Ministry of Finance. We can access the applications from anywhere. The Ministry of

Finance created one login to access all the applications in the Ministry of Finance, which we can open wherever we are with that one login” (FGD, May 22nd, 2022).

A systems approach to the digital transformation of public administration includes using interactive company portals, certified e-mail, online process approval, and other technologies. The electronic signature has taken the place of the handwritten signature (Armenia et al., 2021). Nadine is a web-based official manuscript management information system with internet access to record, store, process, and present official manuscript information within the Ministry of Finance. The basis for this application is Minister of Finance Regulation Number 36/PMK.01/2018 concerning Guidelines for Office Manuscripts within the Ministry of Finance and Minister of Finance Decree Number 63/KMK.01/2018 concerning Implementation Guidelines for Electronic Office Manuscript Applications within the Ministry of Finance. In addition, Nadine was developed as part of the implementation of office automation within the Ministry of Finance. Nadine is equipped with official document previews, dynamic mail flow as needed, and digital signatures. This application has been very useful for administrative matters during the pandemic.

“The Ministry of Finance's FWS plan was supported by an online mailing application (Nadine). However, we felt it was inappropriate to write letters online at that time. This application was not a favorite at the beginning. However, this application immediately boomed. We now had a system for online signatures. Everything could be done online with an automated system that ensured our letters were approved” (FGD, May 22nd, 2022).

The number of civil servants who carried out Work From Office (WFO)/Work From Home (WFH) was adjusted based on the Community

Activity Restrictions known as PPKM level in each work unit. PPKM level 1 required 25% of employees to WFH. PPKM Level 2 required 50% of employees to WFH. PPKM Level 3 required 75% of employees to WFH. PPKM Level 4 required 100% of employees to WFH (Kementerian Keuangan, 2022).

“The implementation of FWS still follows the instructions from the head office. So, if the head office allows us to WFH for 75% of the number of civil servants, our office will accommodate it” (FGD, May 22nd, 2022).

In addition to WFH, the Ministry of Finance's FWS concept recognizes the term WFHb or Work From Homebase. WFHb allows civil servants to work in their hometowns, far from their offices (with applicable terms and conditions). For the WFHb the civil servants are allowed to work from their hometowns for no more than 10 working days. WFHb is only intended for employees who have not returned to their homebase for more than three consecutive months/met their immediate family (Kementerian Keuangan, 2020).

“The Ministry of Finance has three types of flexible working space. First, WFO, namely civil servants who work in offices. Second, WFH or Work From Home where civil servants work at home. Third, work from homebase, which is abbreviated as WFHb. If we want to work from homebase, we have to work in a domicile near the office's location for at least three months. We make a work from homebase permit for two weeks. For Work From Home, there is a radius distance. It is different for each office” (FGD, May 22nd, 2022).

Digital transformation enables digital archiving and image visualization on the screen (Marques & Ferreira, 2020). The Ministry of Finance's digital transformation allows for the online storage of official letters as soft copies, making it easier to find them when needed.

“Before the pandemic, every time we received an incoming letter, we would print it. We archived the mail manually using folders” (FGD, May 22nd, 2022).

Digital transformation highlights the opportunities for the government's service obligations to taxpayers to be fulfilled, using artificial intelligence and security systems to provide advanced assistance to taxpayers and businesses, while also boosting economic growth and trade (Bentley, 2020). The Ministry of Finance's application for taxpayers is complete and is processed automatically.

“During the pandemic, online services were provided for taxpayers. Taxpayers could use the Directorate General of Taxes application to report their annual tax returns and other services. The taxpayer's application is also automatic. If the taxpayer's application is complete, a letter of application will be issued directly from the direct system” (FGD, May 22nd, 2022).

Another advantage of remote work was the increase in motivation and job satisfaction. This happened because the employees' focus on completing their jobs was undivided (Neal et al., 1993). During WFO, civil servants were less focused on their work because their concentration was divided, since they had to complete their work while serving taxpayers, so they needed more time to complete their work.

“In addition, while WFO, we also have to take care of more than one kind of work, for example when serving taxpayers, we often get asked to do other work” (FGD, May 22nd, 2022).

WFH allows civil servants to manage their time to complete their work. WFH has shifted work, so it can be more flexible, efficient, and faster (Rachmawati et al., 2021). The FWS concept allows civil servants to work flexibly from anywhere, and provide faster and contactless services for taxpayers.

“When doing WFH, we are asked to work according to our working hours. However, when doing WFO we feel that our work is not optimal, since we continue working even after our normal working hours. I totally agree if FWS is applied in the future. We can be more flexible in our work” (FGD, May 22nd, 2022).

During the pandemic, the Ministry of Finance established a policy that limited taxpayers' services (number of people and time). The tax office limited the number of taxpayers to five taxpayers per hour. The reason was to avoid crowds that could potentially increase the risk of COVID-19 transmission. Various types of services could be carried out online. Some services could already be done face-to-face or by post or courier services (Firdaus, 2021).

“During the pandemic, the office limited the number of taxpayers served. The number differed, which was subject to every branch policy. In addition, the service time was also limited” (FGD, May 22nd, 2022).

On the other hand, FWS also posed challenging obstacles. The most common obstacle during WFH was the unstable internet network. Another obstacle that the civil servants experienced during FWS was problems related to the infrastructure used, such as interference with electronic devices (Firdaus, 2021).

“The internet network quality is not evenly distributed, so sometimes, when WFH, the network often lagged. Because the application is accessed by almost all civil servants at the Ministry of Finance, the network got slower during peak hours” (FGD, May 22nd, 2022).

FWS also means the Ministry of Finance needs to socialize their digital transformation program with taxpayers better. There are many taxpayers who are still not aware of the online service programs. As a result, the civil servants work to serve the taxpayers, using the online

service, has become more challenging since they have to explain how the app works to the taxpayers (Firdaus, 2021).

“Regarding online services, some taxpayers may not know. We need to conduct counselling and socialize the existence of an online application that taxpayers can choose to use. In the future, we hope that this application can be used by the general public” (FGD, May 22nd, 2022).

Civil servants at the Ministry of Finance highlighted the need for effective communication and socialization of the digital transformation initiatives to taxpayers, to increase their awareness and encourage the adoption of online service programs. This finding is consistent with the literature that emphasizes the importance of effective communication and engagement strategies to drive the adoption of digital transformation initiatives in organizations (Nadkarni & Prüggl, 2021; Barrane et al., 2021). Effective communication and engagement strategies can increase the adoption of digital transformation initiatives and improve the success rate of these programs (Chen et al., 2021). This can be done by conducting information campaigns, providing user training, and using various communication channels to promote the use of online service programs. The use of various channels, such as social media, email, and face-to-face communication, can help increase the awareness and adoption of digital initiatives (Patroni et al., 2016; Sobaih et al., 2020). In addition, socialization efforts can create a positive image of digital initiatives, increase user trust, and improve user satisfaction (Pereira et al., 2017; Ramanathan et al., 2022). By promoting the use of online services, civil servants can also reduce the burden of in-person visits during the pandemic, and improve the efficiency and effectiveness of the public sector.

Subjective norms can influence behavior related to the FWS concept, which is based on the digital transformation, and implemented by the Ministry of Finance in Indonesia. The FWS concept offers three options for work: Working From Home (WFH), Working From Office (WFO), and Working From Homebase (WFHb). This has brought various benefits to both the civil servants and the taxpayers. Taxpayers can now access tax services online, eliminating the need to physically visit the office. For the civil servants, the FWS concept is equipped with supporting applications such as e-Kemenkeu and Nadine, which enable the online storage of official documents, the automatic processing of taxpayer applications, and the use of digital signatures. The implementation of the FWS concept has also increased the motivation and job satisfaction of civil servants, enabling them to work faster, without any physical contact. Civil servants can manage their time more efficiently as well. However, there are some challenges related to unpredictable internet connections and the need for better communication and socialization with taxpayers about online services.

1.3. Perceived Behavioral Control (PBC)

The perceived behavioral control in this study is in the form of the simplicity or difficulty felt by the participants when carrying out work behaviors that reflect past and present experiences, obstacles, and anticipation. Digital perceived behavior refers to how individuals perceive their confidence when using digital technology and how they control their use of digital technology, based on the resources available and their experience (Srisathan & Naruetharadhol, 2022). Perceived behavioral control can also be seen from the differences in work behavior before and after applying the FWS concept.

The pandemic allowed for the faster establishment of digital work (Nagel, 2020). Given the feasibility of a rapid transition to digital work, both businesses and individuals must recognize that digital transformations are possible. However, digital transformations necessitate the use of workers with digital skill sets. The Ministry of Finance's online system allows the system to be integrated directly, making the process faster and easier.

“My mail-related work feels faster with FWS. The online system allows the system to be integrated directly. Mail revision is also easier. The online application allows employers to make revisions directly from the application. The process becomes faster and easier” (FGD May 22nd, 2022).

The offices use digital devices to manage files, and then numerous digital archive information forms are created. Digital management can transform traditional paper-based archives into machine-readable archives that store information on discs and convert it to a digital format (Luo & Gui, 2014). The Ministry of Finance's digital transformation has made its offices paperless.

“The application also allows me to search for the letters that I need. For example, I need a letter related to the WFH WFO schedule. I search in the application, and the file immediately comes out and it is not printed” (FGD May 22nd, 2022).

WFH performance during the lockdown demonstrates that quality family time and work productivity have increased. However, the increase in the time spent by employees in front of computers, and WFH stress, has resulted in physical symptoms (Khan & Jaswal, 2021). During WFH, civil servants were provided with laptop computers by their offices. The civil servants managed their working hours and took breaks when required.

“During WFH, I got a laptop from the office. Stand-by work time depends on the amount of

work. When there is not too much work, I monitor it through WhatsApp. I feel there is a bit of leeway to rest during WFH” (FGD May 22nd, 2022).

The pandemic was expected to cause an increase in home offices. People who previously worked in a home office may have found it easier to work in a home office for an extended period. People with experience in digital work may have been likelier to switch to home office working during the pandemic (Spurk & Straub, 2020). The FWS concept made it easier for civil servants to work.

“The beginning of the FWS implementation was like changing old work habits into new ones. It was a bit difficult at the beginning of the implementation, but after studying it, FWS made it easier for us” (FGD May 22nd, 2022).

The positive side was also demonstrated by the idea that WFH was perceived as efficient, as stated by 60% of the participants. Meanwhile, 40% of them disagreed (Rachmawati et al., 2021). WFH has been a positive change for many people, because it keeps employees productive while assisting with their work-life balance (Kaushik & Guleria, 2020). The FWS concept has more positive than negative sides.

“I see more positive sides of FWS” (FGD May 22nd, 2022).

Because it has now become a habit, civil servants prefer to work online.

“For me, because now it has become a habit, it is better to work online” (FGD May 22nd, 2022).

Workers in virtual offices can better relate to customers and other stakeholders, which benefits the business and improves job performance (Hill et al., 2003). The advantage of this FWS concept is that civil servants can work more quickly and flexibly without having to meet face-to-face.

“On the positive side, work is faster and more

flexible, especially if the time does not allow us to meet directly with taxpayers” (FGD May 22nd, 2022)

Companies can adjust how they use social media, and recognize that it is not only for introducing or promoting products, but also for driving customer and community engagement through social media (Priyono et al., 2020). The civil servants use the Ministry of Finance's social media to publicize the online services program.

“Our office uses social media such as Instagram, Twitter, Youtube, and even TikTok to target all walks of life by providing information about online applications. Through social media, we convey to the public that our services are still running and that there are online services to reduce face-to-face contact” (FGD May 22nd, 2022)

The concept of perceived behavioral control emphasizes the benefits of digital transformation for civil servants, in terms of the ease or difficulty they feel when performing work behavior. The FWS concept is supported by an integrated system and digital management, making work easier, faster to complete, and reducing the use of paper. This leads to increased work productivity and quality time for civil servants, who can better manage their working hours and rest time. The FWS concept also enables civil servants to work more easily from home. However, implementing the FWS concept requires civil servants to be qualified with digital skills to ensure its sound operation.

With this in mind, the following discussion of the green practices of civil servants in the FWS concept will be built upon the insights gained from the analysis of the TPB, and further explore the factors that motivate civil servants to adopt environmentally responsible practices in their workplace. By examining the interplay between individual attitudes, social norms, and perceived control over green behaviors, we can gain a

deeper understanding of the drivers and barriers to sustainable practices in the Ministry of Finance of the Republic of Indonesia.

1.4. Civil Servant's Performance

The performance management of civil servants is crucial for improving bureaucratic efficiency and the quality of public services in Indonesia. At the Ministry of Finance, this aspect is regulated in detail through the Ministry of Finance Decree No. 467/KMK.01/2014 on Performance Management within the Ministry of Finance. In this system, the components of employees' performance assessments include employee performance achievement, behavior score, employee performance score, additional duty score, and creativity score. Performance appraisals are conducted annually, with the employees' appraisal period being from January 1 to December 31. Along with the personal development, performance appraisals between 2015 and 2021 used numbers and predicates, while in 2022, changes occurred as only predicates were used in the assessment.

“The 2022 performance appraisal only shows a predicate, no number like the one in the 2015 to 2021 performance app, with a final total score” (FGD May 22nd, 2022)

Digital transformation has also significantly impacted the civil servants' performance, especially during the pandemic. The goal was to improve the accountability and performance of the work units within the Ministry of Finance. The performance of government officials is likely to improve due to digital transformation (Sirait et al., 2021).

Interestingly, the civil servant performance assessment results from 2018 (before the pandemic) to 2022 (after the pandemic) indicate a significant improvement. The civil servants'

performance predicate, which was initially "Good" in 2018 to 2021, increased to "Very Good" in 2022. This proves that digital transformation has proven to help civil servants maintain their performance during the pandemic, allowing them to continue working efficiently, and they were able to provide optimal public services. Implementing digital transformations in the public sector can provide significant benefits, especially in dealing with crises like pandemics. The digital transformation during the pandemic enabled the best performance in the context of digital work (Reuschl et al., 2022).

In the context of the digital transformation at the Ministry of Finance, another form of performance appraisal is changing the annual performance appraisal application from the conventional method to an online one. Two applications are used to assess the performance of civil servants in the Ministry of Finance: the DJP Sikka-DJP application and the Ministry of Finance's e-Performance application. However, starting in 2021, performance appraisals have now fully switched to the Ministry of Finance's e-Performance application, which has now been moved to the "Satu Kemenkeu" platform. Consequently, the current performance appraisal results only display data for 2021 and 2022. As part of the Ministry of Finance's digital transformation, the performance system application facilitates the process of monitoring and controlling the performance of civil servants.

The Ministry of Finance's performance has shifted to "Satu Kemenkeu." Therefore, the assessment results section can currently only display performance assessments for 2021 and 2022. To find out the current performance assessment, we enter the "Satu Kemenkeu" application then, select the "menu" section then, click "performance" then click "kinerja" (FGD).

2. Green Practice

Before the pandemic began, the Ministry of Finance of the Republic of Indonesia had actually launched a program called “GoGreen Treasury Program” in 2017. This program was designed to create a more environmentally sustainable office (Media Center Ditjen Perbendaharaan, 2017). Since then, the program has been run by representative offices across Indonesia with various levels of success. The program consists of several initiatives, such as saving water, saving electricity, going paperless, etc. (Media Center Ditjen Perbendaharaan, 2017). The program, however, reached a new level of success when the pandemic hit Indonesia hard in 2020. This happened because the pandemic forced the Ministry of Finance’s civil servants to adapt to the new work behavior, namely Work From Anywhere (WFA) (*Work From Anywhere Bagi ASN*, n.d.). WFA in the Ministry of Finance uses the Flexible Working Space (FWS) concept. The concept has indirectly contributed to the implementation of the GoGreen Program, and has influenced the change in civil servants’ work behavior, causing it to be more environmentally friendly. The civil servants, voluntarily and involuntarily, practiced several green practices due to the newly launched program, such as going plasticless and paperless, saving electricity and water, and carbon emissions reductions.

Based on the NVIVO data analysis (Figure 2), several green practices (going plasticless and paperless, saving electricity and water, carbon emissions reductions) that were carried out by civil servants have been identified. In Figure 2, we further map that the plasticless practice is affected by the attitude of the civil servants, saving water by their subjective norms, saving electricity and carbon emissions reductions by their subjective norms and attitudes, time savings by their perceived behavioral control, and going

paperless by their attitude, subjective norms, and perceived behavioral controls. The NVIVO results were, however, analyzed solely based on the results of interviews with the respondents, as well as observations at the Ministry of Finance’s offices. However, the limitation of the research relating to green work behaviors, in the context of the FWS concept, is its inability to be generally applied to other organizations, as the data obtained was mainly based on observations limited to the offices of the Directorate General of Taxes at the Ministry of Finance. A detailed discussion of green work behaviors, related to the implementation of FWS, follows.

2.1. Plasticless

The first behavior is the plasticless initiative. According to the result of the NVIVO data analysis (Figure 2), this behavior is influenced by the attitude of civil servants. When the analysis was carried out, the view of the respondents was that plastic-free is the better option, because plastic is not good for the environment. This was mentioned a couple of times during the FGD by the respondents, and it was also evident through our observations. This particular reasoning is also supported by the results of studies reporting that pro-environmental attitudes toward the environment positively affect employees’ intentions and behavior relating to green practices (Tian et al., 2020). In the TPB, attitude can be defined as the extent to which an individual views a particular behavior positively or negatively (Ajzen, 1991).

In this study, the term plasticless refers to changing the beverage containers provided for use by taxpayers or other office visitors. Before the pandemic started and the Go Green Program was launched, taxpayers and visitors were provided with mineral water in a sealed plastic cup. The plastic cups provided for the taxpayers

and visitors were a major plastic waste source in the offices. However, nowadays, plastic cups have been replaced by paper cups. Using and recycling paper cups can reduce plastic's impact on environmental pollution by up to 40%, and they are more environmentally friendly because they reduce carbon emissions by three times (Foteinis, 2020). Changing plastic cups for paper cups is one of the civil servants' initiatives to create a more sustainable environment in their offices, because they have realized that paper cups are more environmentally friendly than plastic ones. In addition, the digital transformation within the Flexible Working Spaces (FWS) framework at the Ministry of Finance made it possible to reduce face-to-face services with taxpayers. This change has also decreased the use of paper cups, demonstrating an increasingly visible commitment to green practices.

“Right, for example, for our taxpayers we provide an Aqua replacement since the Aqua package is plastic, we changed it to paper cups even though they are similar, but paper can be recycled, plastic is harder (to recycle)” (FGD, May 22nd, 2022).

In addition, based on our observations, the offices provide special logoed drinking containers (tumblers) for tax officials to use to refill their drinks in the office. This action is aimed at reducing the use of single-use bottles.

This study is limited to the Office of the Directorate General of Taxes at the Ministry of Finance, so generalizations may be limited. Certain factors may influence non-plastic behavior that cannot all be considered. In addition, this study may not be able to capture long-term behavioral changes or the impact of certain interventions.

2.2. Saving Water

The second behavior is saving water. We found that, based on the result (FGD & observation) of the NVIVO analysis data, that saving water behavior is affected by the subjective norms at the office. Subjective norms are the perception that a particular behavior will receive approval from people that are deemed important (Ajzen, 1991) by the office staff. This means the influence of important figures will likely affect the employees' intention and behavior (Bouarar & Mouloudj, 2021). This is what happened once the Go Green Program was launched in 2017, which was before the pandemic, in which saving water was part of the campaign. The campaign, which was implemented by the main office through official policies, affected the employees' behavior regarding the adoption of greener practices, especially saving water, at their offices. The branch head, managers, and senior employees are also expected to set an example for the ordinary employees by undertaking green practices. The result of the campaign is monitored by the main office.

“In our office there is efficiency monitoring which has been done for quite a long time, so we are monitored when it comes to the use of water and electricity” (FGD, May 22nd, 2022).

As part of the campaign, signs to remind the civil servants to save water are located in several places around their offices. To support the campaign, staff took part in it by using water more moderately, based on what they needed it for. Studies by Tian et al. (2020) and Banwo & Du, (2019) report that subjective norms positively affect environmentally friendly behaviors of employees in the office at the Ministry of Finance.

“Talking about green practices, in several selected locations (at the office) there are signs that remind us to switch off lamps and

water taps. So, there is some sort of awareness” (FGD, May 22nd, 2022).

The effort to save water produced different results when the pandemic hit the country. At the beginning of the pandemic, the offices were closed for several weeks, resulting in very minimal use of water. After they reopened, the WFA system was implemented, causing the majority of the employees to work at home. As a result, those who were in the offices were willing to turn off water taps when no one was using them, because they believed it was the right thing to do. The digital transformation within the Flexible Working Spaces (FWS) framework at the Ministry of Finance can potentially reduce water consumption, especially in the office environment, because the FWS concept allows civil servants to work from various locations. Saving water aims to preserve the environment (Tijs et al., 2017). As a result, implementing sustainable practices or green practices is increasingly becoming a reality.

“Right, we are also economical, yes, we also apply this to our families, yes, so if a tap is running, we turn it off” (FGD, May 22nd, 2022).

This study focused on the Office of the Directorate General of Taxes at the Ministry of Finance, so the possibility of generalizing the results is limited. Other variables not considered in the study may influence water-saving practices in the work environment. In addition, this study may not be able to track long-term behavioral changes or the impact of various interventions.

2.3. Saving Electricity and Carbon Emissions Reductions

The third behavior is saving electricity. During the analysis process, the answers of the respondents in relation to the issue of reducing the use of electricity were weighed favorably. The results of this study are in line with other studies

that examined the same thing in various countries, namely the occurrence of electricity savings in the workplace and reduced carbon emissions in public areas, despite a surge in electricity use by private homes, caused by the concept of Working From Anywhere (Bernstein et al., 2023). Therefore, when the FGD results and observation results were organized using NVIVO, it was found that the factors influencing civil servants to save electricity are affected mainly by the subjective norms in their offices and by the attitude of the civil servants. For a subjective norm, the way this factor affects the civil servants’ green practices is similar to that of saving water. A subjective norm is a social action in an environment that encounters individuals, so that it has the same norm as the existing community (Kristia et al., 2023). This happens in the environment of the employees of the Ministry of Finance, who save water simultaneously and make it a norm, so that the individuals in it want to do it. This is because both are part of the Go Green Program launched in 2017. The campaign was initially started by putting signs in several places around the offices to remind employees to switch off and save electricity. This is how the campaign also became a subjective norm in the offices, because the result of the campaign is monitored by the main office.

“Talking about green practices, in several selected locations (at the office) there are signs that remind us to switch off lamps and water taps. So there is some sort of awareness” (FGD, May 22nd, 2022).

“In our office there is an efficiency monitoring system which has been in place for quite a long time, so we are monitored when it comes to the use of water and electricity” (FGD, May 22nd, 2022).

However, when the pandemic happened, the effort to save electricity became easier, because the offices were closed for several weeks, meaning very little electricity was used. When

they reopened, the WFA system had been put in place, meaning not many of the civil servants were in their offices during working hours. As a result, the civil servants who were scheduled to be in their offices would consciously not switch on electrical devices or lamps that were not needed, and would switch off the majority of the lamps and electrical devices when no one was using them. This act stems from their belief that this was the right thing to do as civil servants, whose salaries are paid by the government. Several countries in the US and Europe also experienced the same thing; electricity consumption figures experienced a downward trend in the public sector, although there was an increase in residential consumption (Bernstein et al., 2023).

"Our office was closed for a period of time, and all our services were completely halted, so no electricity was used during that time. And fortunately, our office has good natural lighting, so during the day, all unnecessary lights are turned off. Additionally, computers are turned off when not in use." (FGD, May 22nd, 2022).

"Yes, it must be implemented, right, because we use government facilities. The point is that we save by using things moderately, yes, if there is a certain moment, yes, we really have to remind each other" (FGD, May 22nd, 2022).

The civil servants also admitted that they spent less time using electrical devices when they worked under the WFA system, compared to when they worked full time in their offices. For example, when they worked from home (WFH) they confessed that they only used, for example, a laptop when they had work to do. After they finished their work, they would shut it down or put it into sleep mode.

"When working full time at the office, we use computers all the time, it's like that, but if you're at home, it's like if you're done with one thing, that's it" (FGD, May 22nd, 2022).

During the pandemic, the civil servants' behavior toward electrical devices and electricity in general would in turn influence the amount of carbon produced and emitted by their activities, both at their offices and at their homes. This is the reason why carbon emissions reductions, when analyzed using NVIVO based on the FGD participants' answers, are found to be affected by subjective norms indirectly. According to Lee & Tanusia, (2016), the attitude and subjective norms of students influence their intention to conserve energy at university. Another study by Nie et al. (2019) reports that the energy-saving behavior of residents in Changcun, China is mainly affected by subjective norms.

This research focused on the Office of the Directorate General of Taxes at the Ministry of Finance, so generalizations may be limited. The civil servants' support and adherence to the Ministry of Finance's policies related to energy saving may vary, affecting the level of adoption and the effectiveness of the electricity-saving strategies. The civil servants' awareness and understanding of the importance of energy saving also affects the success of electricity-saving practices in the workplace.

2.4. Paperless and Time Savings

The next practiced behavior is going paperless. Data analysis showed that paperless behavior is affected by all three components of the theory of planned behavior, which are attitude, subjective norms, and perceived behavioral control. Being paperless is the only behavior identified in this study that is affected by all the variables of the theory. The existence of Nadine, an online application that enabled civil servants to work during the pandemic, is the reason paperless behavior is affected by the three variables. Nadine was designed by the main office to help the civil servants to work more

effectively and efficiently. Nadine's implementation was regulated through official policies. As a consequence, all the civil servants working for the Ministry of Finance throughout Indonesia have to complete their work using Nadine. This then creates a subjective norm situation; if the civil servants follow the policies correctly, they will be rewarded.

The design of an application, so that it makes an organization paperless, is also another research finding (Baniulyte et al., 2023). Various reasons are the cause for different agencies going paperless, and in the pandemic era, the strongest reason was to keep people safe from various health risks. The awareness that going paperless would reduce various risks is an attitude (Nguyen et al., 2023). Collective action within agencies to reduce risk, and to influence other individuals to perform paperless actions is a subjective norm concept (Kristia et al., 2023).

“For work related to paperwork, yes, I feel it's become faster because we use the online system, we can use the system directly. When revising letters, it's even easier because I've used the online application, no paper printing in advance is needed, if there is a revision it comes directly from the application which is faster and easier” (FGD, May 22nd, 2022).

The civil servants believe that Nadine has made their work easier, because they do not have to reprint numerous papers anymore, minimizing the amount of paper used in the various offices. However, this change in perception did not come instantly. According to the civil servants, when the app was first introduced, there was a certain amount of resistance, because the civil servants felt that it was easier to work conventionally. Nonetheless, after being forced to use the app, due to the pandemic, there was a change in people's attitude toward the app.

“At first we felt like we were forced to do something new, there was a resistance at first.

We felt like how come it is really complicated, we feel better when things were done conventionally, right? Conventionally we print the letters and when there is a revision from the division head, we revise the letters and then we reprint them. That is the norm. So when there is a new thing we felt like we were being forced. At the beginning we felt it was hard to do, but after sometime we got used to using the app and it slowly become easier. Eventually we felt like it was easier to process the letter online with the new system, compared to the old process” (FGD, May 22nd, 2022).

Another advantage brought by Nadine is the time needed to finish any paperwork became much shorter. For example, before the app was fully implemented in the offices, there were two stages to be passed before letters were approved. The letters need to be approved by the division head and then, after that, by the office head. In the past, this process could take quite a long time because the division and office heads were not always in their offices. However, with Nadine the steps have been cut considerably, making the whole process shorter and faster. This is where PBC occurs. The whole sequence of information provided by the respondents during the FGD, and also our observation results, were the main factors that played an important role in determining the factors that affect paperless behavior, which in turn helps minimize the time needed to complete various tasks.

“Using Nadine has speeded up our work process. I just need to send WA message to let my division head know I have submitted letters to be approved. Or I can message the office head's secretary to let them know new letters have been submitted, since I just cannot casually message the office head. So, the whole process is faster now” (FGD, May 22nd, 2022).

The practices discussed above, such as going plasticless, saving water, saving electricity, going paperless, etc. show that there is an influence of

attitude, subjective norms, and perceived behavioral control in the green behavior of civil servants at the Ministry of Finance, both before and during the pandemic. Before the pandemic, the GoGreen Program and the monitoring program, launched by the main office of the Ministry of Finance, had established a set of rules that forced civil servants to practice greener behavior. The existence of the two programs has become guidance that acts as the subjective norms for civil servants. However, based on the FGD result and online observations, it can also be seen that the civil servants' intention to practice greener behavior is also affected by their attitude and perceived behavioral control. Before the two programs were implemented, some civil servants already felt that, for example, using electricity and water moderately, based on what they need, is the right thing to do. However, the enforcement of WFA when the pandemic happened in 2020 shifted the way the civil servants worked. This caused some changes, including the practice of saving electricity and water, and going paperless, which became more prominent due to the pandemic situation.

This finding is in line with previous published studies examining the relationship between the theory of planned behavior (TPB) and the intention related to green behavior. Ekasari & Zaini (2020) reported that the TPB affects people's intention to use eco-friendly reusable bags positively. Another study showed that the TPB also positively affected the intention to purchase utilitarian and hedonic green products (Zhang et al., 2019). Similar results were also revealed by Bouarar & Mouloudj (2021), who found that attitude and subjective norms positively affected the intention of Algerian employees to practice green behavior. Those findings are quite similar to the findings of this study, in which most of the green behavior of the civil servants, which include going plasticless, saving water,

saving electricity, carbon emissions reductions, time savings, and going paperless, are all affected by attitudes and subjective norms. On the other hand, in this study, PCB only affected time savings and paperless behavior. This can be explained by the direct advantages that civil servants get when working using the new Nadine app. After getting used to the app, they feel that the app has made their work easier and faster. As pointed out by Ekasari & Zaini (2020), the more comfortable someone feels about something, the stronger their willingness to be involved with that thing is.

This study is limited to the Office of the Directorate General of Taxes at the Ministry of Finance, so generalizations may be limited. Variations in the skills and technological readiness of the Ministry of Finance's civil servants in using digital tools and applications to reduce paper use and improve work time efficiency may affect the adoption and effectiveness of green work behaviors. Differences in the implementation and enforcement of policies related to paper reduction and work-time flexibility may also affect the adherence and effectiveness of green work behaviors.

CONCLUSION AND SUGGESTION

The Ministry of Finance's digital transformation supports the Flexible Working Space (FWS), an office automation strategy that allows civil servants to use the Work From Anywhere system with the same workflow they experience when in their offices. During the pandemic, the Ministry of Finance's WFA was divided into two parts: WFH and WFO, where the percentage of employees doing WFH and WFO would be based on the Community Activity Restrictions known as PPKM level. Personal devices (laptops) and safe office automation applications make working easier and these can be accessed using a single login account during WFA. One of the office

automation applications used in the Ministry of Finance is called Nadine (an official memorandum application with online approval and digital signature).

The digital transformation of the Ministry of Finance has both positive and negative aspects. The positive aspects experienced during the pandemic are that civil servants could work faster, more efficiently, more flexibly, are more focused, and have less contact with colleagues and customers (taxpayers). Meanwhile, one disadvantage is that the internet network is occasionally unstable, disrupting the discussion and/or the learning process. As a result, the whole process has become less effective. Another disadvantage is the fact that the Ministry of Finance's digital transformation revolves around online services for customers (taxpayers). However, not all the services are available online for the taxpayers. In addition, currently, there are many taxpayers who are still not aware of the digital service programs launched by the Ministry of Finance. Therefore, it is necessary to promote the services better to increase the taxpayers' awareness of the programs, and eventually get them to use the digital services.

The civil servants at the Ministry of Finance practiced several green practices before the pandemic began, such as saving water, saving electricity, and to some extent going plasticless and paperless. However, after the pandemic happened and FWS was implemented, those practices became more prominent, producing better results compared to the results before the pandemic. The pandemic also brought other advantages, including carbon emissions reductions and time savings. The practices, based on the NVIVO's analysis, are influenced by attitudes, subjective norms, and perceived behavioral control. Nonetheless, not all the practices are influenced equally by the three TPB

cores. The FWS concept of the Ministry of Finance supports civil servants' performance and environmental sustainability.

The study has some limitations, such as its lack of generalizability to other organizations, as the information provided is limited to the Ministry of Finance in Indonesia. It did not measure the long-term cost-effectiveness of the FWS concept, which is important to justify its implementation. Furthermore, the data collection method, which relied on FGD, may not have fully captured the range of experiences and opinions of the civil servants.

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