

Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Economics



Master's Thesis

**Application of the Soft System methodology for Problem
solution in KFC**

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DIPLOMA THESIS ASSIGNMENT

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Thesis title

Application of the soft system methodology for problem solution in KFC

Objectives of thesis

Basic economic sectors are suffering from direct impact in many countries due to the spread of pandemic around the world. KFC have been facing many challenges in today's global economy. The business environment which is divided into the micro-environment and macro-environment is very critical as it determines the decision and success of an enterprise. We will be examining the micro-environment and problems KFC has during Covid-19 using Soft Systems Methodology and suggesting the solution of chosen problems.

Methodology

The survey will be conducting through problem description, Rich Picture, Conceptual Model, CATWOE, Formal Systems Model and others relevant materials including journals, magazines, the internet etc. Soft System methodology will be used as a tool for creating and evaluation the possible solution of problems of KFC. Finally, the best solutions will be recommended for implementation.

The proposed extent of the thesis

70

Keywords

Soft Systems Methodology, Rich Picture, Conceptual Model, CATWOE, Formal Systems Model

Recommended information sources

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Declaration

I certify that the paper entitled “Application of the soft system methodology for problem solution in KFC” submitted as a partial requirement for the degree of Master in Economic and Management is the result, which is researched by me, as well this project report, in whole or part of it cannot be submitted to any other University or Institution for a purpose, including a higher degree.

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Application of Soft System Methodology for Problem Solution in KFC

Abstract

The main aim of the diploma thesis is to investigate the problems of KFC during the Covid -19 and make solution based on the situation through soft system methodology. To achieve this aim, we will be examining the micro-environment into details, reduced advantage, market demand is reduced, declining Consumers' Confidence, factors of challenges, management tools, bootstrapping, competitive advantages will be in details.

The world-wide spread of the Covid-19 pandemic has been a biggest impact on countries' economies, and the restaurant industry, particularly in restaurants business, has been hardly hit. The world-wide pandemic has disrupted supply chains and alter conversations about worker and staff safety at KFC under Amrest in Czech Republic. Based on gathered data for the period, The survey will be conducting through problem description, Rich Picture, Conceptual Model, CATWOE, Formal Systems Model and others relevant materials including journals, magazines, the internet etc. Soft System methodology will be used as a tool for creating and evaluation the possible solution of problems of KFC. Finally, the best solutions will be recommended for implementation.

Keywords: Soft System Methodology, Rich Picture, CATWOE, Conceptual Model

Aplikace metodiky soft system pro řešení problémů v KFC

Abstrakt

Hlavním cílem diplomové práce je prozkoumat problémy KFC během Covid -19 a na základě této situace najít řešení pomocí metodologie soft system. Abychom dosáhli tohoto cíle, podrobně prozkoumáme mikroprostředí, sníženou výhodu, sníženou tržní poptávku, klesající důvěru spotřebitelů, faktory výzev, nástroje pro správu, bootstrapping, konkurenční výhody.

Celosvětové rozšíření pandemie Covid-19 mělo největší dopad na ekonomiky zemí a restaurační průmysl, zejména v restauračním podnikání, byl jen stěží zasažen. Celosvětová pandemie narušila dodavatelské řetězce a změnila rozhovory o bezpečnosti pracovníků a zaměstnanců v KFC pod Amrest v České republice. Na základě shromážděných dat za období bude průzkum prováděn prostřednictvím popisu problému, bohatého obrázku, konceptuálního modelu, CATWOE, modelu formálních systémů a dalších relevantních materiálů včetně časopisů, časopisů, internetu atd. Jako nástroj bude použita metodika Soft System pro tvorbu a hodnocení možného řešení problémů KFC. Nakonec budou doporučena nejlepší řešení k implementaci.

klíčové slovo: Metodika měkkého systému, bohatý obraz, CATWOE, koncepční model

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1. INTRODUCTION

The global expansion of the Covid-19 outbreak has had a tremendous impact on the global economy, and the service industry, notably fast-food outlets, has been particularly badly impacted. Fast-food restaurants gained enormously from globalization before to the Covid-19 epidemic, but they suffered a setback when the pandemic placed major limitations on the cross-border flow of commodities and people. Based on the investigation, it is discovered that the reasons for such an impact include slower globalization, customers' lower income, and government bans, using KFC as an example.

As a result, today's working environment for all restaurant services is dynamic, yet it is growing increasingly difficult. KFC Restaurants, in particular, are under pressure during Covid-19, which forces it to respond to change requests as quickly as possible and to be innovative in their operations. As a result, business must be adaptable and make frequent and timely strategic, tactical, and operational decisions, some of which are complicated and critical.

COVID-19 has changed – and continues to change – the notion of "normal" around the world, and most industries are still trying to react. The impact on the KFC has been especially noteworthy. Establishment of KFC is fighting to keep their heads above water as restaurants close for sit-down service. On the other side, business that can provide delivery and pick-up services are witnessing significant increases in order volume. Meal kit delivery are being also popular in the world.

Restaurant foot traffic and online reservations can be down to zero, but online order and delivery amount are growing in the Czech Republic, the United Kingdom, Australia and Canada, with steady increases on the last 45 days, especially for casual dining and quick-serve or fast-food restaurants, where site visits and purchases have increased (Brown M Loral, 2020).

Although individuals are going shorter distances to pick up these items, the share of carry-out vs delivery has remained pretty stable as orders have climbed. With all of those not being able to run restaurants because of people participating in the fast-food sector, and KFC is being one of them, which is also striving to survive in a terrible scenario and trying to solve the problem by following some of the procedures. To make such a decision, the responsible individual may need a large amount of relevant data, information, and understanding of soft system methodology. Data processing, as part of the decision-making process, must be done promptly and often in real time without sacrificing vital information. Typically, such processes necessitate the use of one of the techniques.

(SS) methodology has an option to use in a number of various ways. These strategies are adjusted to the requirements of the company receiving support. One of the most successful techniques to coping with complex decision-making processes is soft system methodology (SSM). Soft system technique aids in the gathering of information about the problem as well as the development of a final strategy that exactly addresses the issue. soft system methodology helps to understand the scenario and surroundings of the problem rather than to solve the problem of the company which really important to get out the bad situation.

Many attempts to define an issue are thwarted by the complexity of organizational/social problem situations: in many of these instances, the problem is 'what is the problem?' SSM gives a framework for dealing with these types of issues. Within SSM, there are two basic modes: real-world activities and real-world systems thinking. Interviews and meetings are used to acquire a better grasp of the problem situation, which is depicted using 'rich visuals.'

The principles of hierarchy, communication, control, and emergent features are used in systems thinking to identify 'relevant systems' that may yield useful insights. These relevant systems are logically characterized by developing 'root definitions,' which are then utilized to construct 'conceptual models,' which reflect different points of view. Through an "appreciative process," these conceptual models are then employed as the foundation of a discourse, which may lead to viable and desirable change and, finally, action. Soft Systems Methodology was created over a

twenty-year period by Peter Checkland of Lancaster University's Department of Systems and others. The following axioms underpin Soft Systems Methodology:

1. Problems do not exist independently of people; they are mental creations defined by particular world views; as a result, focus on the situation rather than the problem.
2. Problem interrelationships = 'mess' (multiple problem situation).
3. Worldview – each person's unique (and equally legitimate) perspective of the universe.
4. (As a corollary to 1) Solutions are likewise intellectual creations, and no single "issue" exists.
5. Sharing of perceptions, persuasion, and debate are the most effective ways to alter situations. Rather than being experts, analysts should be participatory and therapeutic.
6. Analysts are inextricably linked to the problem.

Soft system technique can be integrated to better handle organizational problems through this process, which might be attractive in some circumstances for a variety of reasons (Smith and Farquhar, 2000). I am following same methodology to solve the problem of KFC.

2. OBJECTIVES

The spread of the epidemic around the world is having a direct impact on basic economic sectors in many countries. KFC have been facing many challenges in today's global economy. The main objective of this study is to integrate all these challenges through soft system methodology and build a user friendly and interactive decision for the organization. The main objective can be split into following parts:

- Introduce the way to process the information through (SSM) and tool to get exact solution of the problem through application.
- Finally, to select the best socially feasible solution.

3. METHODOLOGY

The world-wide expansion of the Covid-19 epidemic has an enormous impact on economy, and among the some of the sectors, service industry has been suffering mostly, particularly fast-food restaurants, has been badly hard hit. I developed Rich picture model based on problematic situation. Through the building of our model, we partially used model to show the real situation of KFC during Covid-19.

Meanwhile, we develop a conceptual model and a CATWOE for the enterprise challenge, and we equip the firm with a solution based on the model. The Soft System methodology will be used to create and evaluate viable solutions to KFC challenges. Finally, the best options for implementation will be suggested. Before applying the model in business, we observe several different factors for different purpose as follows:

- Learn about the micro-environment, which is the environment that is in direct touch with the organization and has an immediate impact on business operations. The company, suppliers, marketing intermediaries, competitors, general public, and customers all together six elements of the micro-environment.
- Rich picture allows for descriptive analysis of cross-sectional and time-series data.
- Predictive modeling of time series in general.
- The study of Soft Systems Methodology aims to promote problem-solving skills and an understanding of the issue. Which is being researched in order to tackle the KFC problem.
- How to address issues that are causing human activities to change.
- Consumer confidence is eroding as a result of a lost competitive edge and decreased market demand.
- After observing the difficult circumstance, choose the best socially possible solution.

4. THEORETICAL PART

4.1 Systems science

A system is a collection of items that are interconnected in such a way that identifiable behavioral patterns emerge over time. Systems science is an interdisciplinary study that investigates the complexity of natural, social, and other scientific systems (Field, 2005, p. 14). Systems dynamics modeling, agent-based modeling, microsimulation, and Big Data approaches are some of the systems science methodologies.

As a result, system science thinking can aid researchers in determining how interventions can affect illness outcomes when considering the system multilayered elements that exist in populations. We occasionally come into difficult public health issues that classic epidemiologic models are unable to fully investigate. The term "system dynamics" was used to describe the connections between changing system structure and behavior. It is founded on engineering principles. The goal of system dynamics models is to create a structure that can duplicate the key features of a dynamic situation without the use of external variables.

System dynamics approach always give priority to continuous view of complex social, managerial, economic, or ecological systems approach. In this idea, a system has interdependence of units, mutual interaction, information feedback mechanisms, and circular causality. To the insanely complex (this map was commissioned by Tony Blair's government as part of a comprehensive effort to combat obesity in the UK;

den Broeck, 2019), below, for a detailed discussion of how the systems model was created): Stock and flow relationships are at the heart of system dynamics modeling.

Stocks are the sources of the system's instability or changeable behavior; they accumulate or diminish over time. Flows are the rates at which equities change. Developing a system dynamics model is an iterative process involving numerous stakeholders' involvement.

In addition to revising the systems map, participants provide feedback on realistic stock levels and flow rates, which is essential to construct computer simulation models that illustrate how the system works. The simulation models are calibrated using experimental data and tested to determine if they can repeat past trends before being used to generate predictions.

When a model is found to be trustworthy, it is put into a "steady state," or a state of dynamic equilibrium, with a predetermined number of stocks and flow rates based on known data. After then, the stocks and flows are changed to simulate various scenarios. System dynamics modeling can be used when component stocks and flows are recognizable and measurable, feedback loops are operational and understood, and variation is central to the study assumption. It's especially well-suited to addressing public health issues that involve input from a range of disciplines, such as health policy, chronic disease management, health-care capacity, and "syndemics"—the occurrence of several overlapping syndromes or epidemics within communities.

4.2 System thinking approaches

Another pioneer in the area, Peter Senge, describes systems thinking as "a discipline for recognizing wholes and a framework for understanding interrelationships rather than things, for seeing patterns of change rather than static snapshots"¹¹ ([Senge, 1990](#)). People who succeed in dealing with complexity, according to Senge, are functioning in an intuitive domain that we don't even contemplate in our educational theories, highlighting an intuitive quality of systems thinking ([Benson, Borysenko, Comfort, Dossey, & Siegel, 1985](#)).

First, the objective definition: Systems thinking is a collection of synergistic analytic abilities for improving the capacity to observe and comprehend systems, predict their actions, and make adjustments to them to achieve desired outcomes. As a system, these abilities work together.

This definition's elegance lies in its simplicity and practicality. This concept might be conveyed in an accessible manner to an audience with no experience in systems science with a little information about the nature of a system. The following are the definitions of the terms used in the definition:

Systems: Collective entities are made up of groups or combinations of interconnected, interdependent, or interacting parts.

Synergistic: Synergy is the main elements which is as the interaction of elements in such a way that when they are combined, the in total effect is larger than individual elements.

Analytical skills: Skills that enable you to conceptualize, communicate, and solve both complex and simple issues and concepts, as well as make rational decisions based on available data.

Demonstration of the capacity to apply logical thinking to obtaining and evaluating information, devising and testing problem-solving solutions, and formulating strategies are examples of such skills.

Identify: To recognize as belonging to a specific category.

Understand: It is better to fully understand of the specific things, nature, or intricacies to foresee as a deducible result.

Devise modifications: Changes or adjustments that are devised, planned, or elaborated.

After the purpose of systems thinking has been stated, the definition will be broadened in terms of substance (elements and interconnections).

1. Recognizing Interconnections: Recognizing interconnections is the foundation of systems thinking. This ability entails the capacity to recognize crucial linkages between system components. Even highly educated folks who have never been exposed to systems thinking lack this aptitude. 8 (Plate & Monroe, 2014).

2. Recognizing and Understanding Feedback: Cause-and-effect feedback loops are formed when some of the interconnections come together.³ (Hopper & Stave, 2008). A requirement of systems thinking is identifying those feedback loops and understanding how they effect system behavior (Plate & Monroe, 2014).

3. Recognize System Structure: A system's structure is made up of elements and their relationships. Systems thinking requires an understanding of this structure and how it permits system behavior^{6, 10}. (Ossimitz, 2000; Richmond, 1994). Understanding system structure requires recognizing links and comprehending feedback.

Despite the fact that this factor is not explicitly addressed in Hopper and Stave's (2008) or Plate's (2014) taxonomies, it can be viewed as a combination of the two aforementioned aspects and is described in other major works^{6, 10} (Ossimitz, 2000; Hopper and Stave, 2008; Plate, 2014 Richmond, Virginia, 1994).

4. Distinguishing Stocks, Flows, and Variables: Any pool of a resource in a system is referred to as a stock. This could be a measurable value, such as the amount of paint in a bucket, or a subjective value, such as the level of trust between two friends. Flows are indicated as changes in these Category. The things that can be modified are known as variables. Alterable system elements that change stocks and flows, such as a flow rate or a stocks big quantity. The capacity to recognize how these stocks, flows, and other variables operate is a critical system capability.

5. Non-Linear Relationships Identifying and Understanding: This element deviates from Hopper and Stave (2008) and Richard Plate (2014)³ taxonomies (Hopper & Stave, 2008; Plate & Monroe, 2014).

Non-linear stocks and flows are referred to by this element. This element might theoretically be categorized as Differentiating Types of Stocks, Flows, and Variables.

However, The concluding, on the other hand, appears to implicit a straight flow. Non-linear flows are segregated into this element to avoid confusion.

6. Dynamic Behavior: Interconnections, how they interact to form feedback loops, and how these feedback loops influence and are made up of stocks, flows, and variables all contribute to a system's dynamic behavior. This behavior is tough to comprehend or explain understand without training in systems⁸ (Plate & Monroe, 2014). Emergent behavior is a word used to describe when something unexpected happens. One type of dynamic behavior is unforeseen system activity. Differentiating between different forms of stocks, flows, and transactions. Understanding dynamical systems necessitates the identification and comprehension of variables, as well as the identification and comprehension of non-linear connections.

7. Conceptually Modeling Systems to Reduce Complexity: This element deviates from the taxonomies of Hopper and Stave (2008) and Richard Plate (2014)^{3, 8} (Hopper & Stave, 2008; Plate & Monroe, 2014).

This section erected as a similar to Hopper and Stave's Using by Conceptual Models, it is distinct. This ability to conceptually model distinct components of a system and see a system in multiple ways is referred to as this element. This activity goes beyond the bounds of established system models and into the domain of intuitive simplification using techniques like reduction, transformation, abstraction, and homogenization¹⁶ (Wade, 2011). Perceptual wholes can diminish the conscious accessibility of their pieces, according to research⁹ (Poljac, De-Wit, & Wagemans, 2012).

The ability of our global population to participate in effective systems thinking is essential to our planet's future.

The use of systems thinking spans numerous industries, assisting and linking them in unexpected yet significant ways. For a number of reasons, the skill set of systems thinking has stayed on the educational periphery thus far. One of these issues is the lack of a thorough and commonly recognized definition of systems thinking. This paper proposes such a definition.

The proposed definition passes the System Test, indicating that it is systemically sound. The definition includes a clear objective, components of systems thinking, and explanations of the links between these parts. The definition encapsulates the most commonly mentioned and significant systems thinking competencies in the literature. This term can now be applied to systems thinking educational activities, systems science, and a variety of other disciplines that require crucial systems understanding and intuition.

4.3 The Soft Systems Methodology

The Soft Systems Methodology (SSM) arose from Lancaster University's research into the use of Systems Engineering techniques to solve "management/business problems." In other words, they aimed to solve business challenges using a Hard Systems approach. They noticed that the technique frequently faltered at the problem definition stage. This occurs simply because the many stakeholders have differing perspectives on what comprises the system, its purpose, and hence the problem.

Two key figures in the formation of the SSM were Peter Checkland (1999) and Brian Wilson (2001). Through "action research," we were able to put together a viable and workable technique for identifying and fixing "soft" ill-defined problems.

" This technique was more than just a collection of procedures; Checkland and Wilson also created a set of tools to assist users in completing them. These include:

- Rich Picture

- Conceptual Model

- CATWOE

- Formal Systems Model

I'll get to these later because I'd prefer to concentrate on the strategy right now. A perspective of the SSM is shown in. Since its inception in the 1970s and 1980s, it has evolved as diverse workers have contributed their expertise. A seven-step strategy to SSM. While this is an early representation, it does allow for the clarification of numerous crucial and important components of SSM.

Figure 1 a seven-step strategy to SSM.

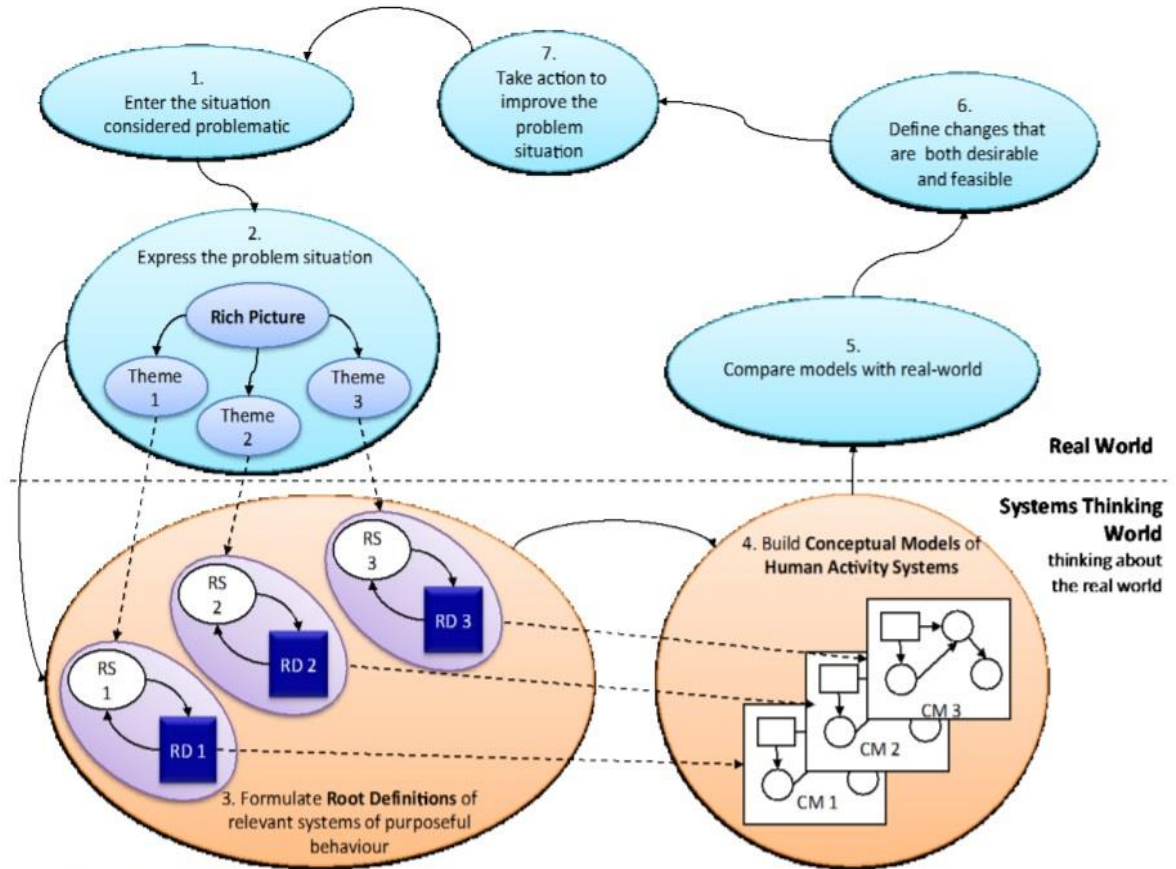


Figure 1: The 7 Step Soft Systems Methodology

Source: Soft system methodology (SSM)

Before going into depth about the seven steps, it's important to understand SSM's basic philosophy. It arose from the realization that the real world is complex and messy in part because we, as humans, live in it. The identical situation will be perceived differently. Brian Wilson (2001), one of the founders of SSM, gives a basic example of this.

He suggests imagining two people enjoying a television show together. Both had seen the identical images and heard the same noises, yet they come to radically opposite opinions about whether the show was excellent or bad. They state their conclusions and then argue about who

is correct! Both are correct because they employed their own mental model, which includes conceptions of what is good and what is not.

If the mental models' ideas could be made explicit rather than implicit, they might be used to compare what was observed, allowing each observer to explain their conclusion. Although they may disagree about the merits of their separate models, the debate may now be conducted on a more rational and defensible basis. The phrases "rational" and "defensible" are crucial and constitute the foundation of the SSM. In simple terms, SSM takes chaotic real-world disputes created by people with various perceptions and turns them into defensible and reasonable models that can be compared to what is happening in the actual world to aid in making decisions or suggestions about how to respond to the issue or problem. Conceptual Models are rational and defensible models that are built on the use of defensible logic.

I want to underline that the Conceptual Representations are logical models of what the world could be like, not models of the real reality that we experience. SSM isn't truly problem solving in the sense of looking at the real world to figure out what's causing problems. It's critical to remember that these Conceptual Models are representations of what must be done logically to attain the Root Definition's goal. Conceptual Models are representations of what "good" looks like that may be compared to reality to see where improvements can be made. Regrettably, the language of SSM is not one that is commonly used.

Returning to figure 1, we can see that the lower part of the diagram is about abstract systems thinking, while steps 3 and 4 are about articulating Root Definitions and constructing Conceptual Models for the work that needs to be done. Checkland et al. were interested in systems that involved humans doing jobs and activities when developing the SSM, as opposed to the traditional equipment or machine-focused Systems Engineering environment from which they originated.

They refer to Conceptual Models as a Human Activity System to emphasize this point. The upper part of Figure 1 is concerned with the real world, beginning on the left with an attempt to determine what one should think about. The right-hand side is concerned with what we will be able to do with the information gained from comparing logical Conceptual Models to real-world situations. Let's look into all of this process.

Step 1 Enter situation considered problematic: The right-hand side of this step is concerned with what we will be usefully based on the knowledge gained from comparing logical Conceptual Models to reality encountered, while the left-hand side is concerned with what we will be usefully based on the knowledge gained from comparing logical Conceptual Models to reality encountered. Let's look into all of this process. viewpoints on situations that are considered negative and hence have possibility for improvement. This process usually includes some basic investigation into the situation to obtain information on the major stakeholders, existing performance, and challenges once it has been agreed that some modification or review is required.

Step 2 Express the problem situation: Recognizing the complexity of the actual world, the next step is to chronicle the many points of view on the subject. Checkland et al established the concept of a Rich Picture to capture the multiple impressions in order to achieve this. They realized that words alone were insufficient to convey complex circumstances.

Diagrams and drawings are far more effective and can hold a greater amount of information per square centimeter. The idea behind creating a Rich Picture of a situation is that it will help you understand it better:

- Allows for the discovery of interpretation errors.
- Allows for consensus on the interpretation to be used.

- Is a source of ideas for how relevant systems may be described by merging relationships, problems, and other aspects. It facilitates in the identification of themes applicable to the world of systems.

There are no official Rich Picture modeling symbols because every circumstance is different, and it is vital to convey this potential variability. However, after years of use, a select few have become standard.

Step 3 Create root definitions for important systems of intentional behavior: This is a critical stage in the SSM. The Root Definition is a mission statement that captures the essence of the relevant system's unique situation. The transformation carried out by the appropriate system is at the heart of the Root Definition. This is reflected in the Root Definition's main verb.

Step 4: Build Conceptual Model of Human Activity Systems: The conceptual model "is simply a structured set of actions that logic requires in a notional system that is to be that stated in the root definition," according to the root definition. (SSM, p. 170, 81).

Step 5: Models are compared to the real world in the following ways: Step 5 involves going back to the real world and comparing what we see to what the models have captured. The comparison's goal is to spark discussion on what may be done to improve the situation.

The method employs models to provide a technique of perceiving a different vision of reality by putting assumptions to the test that may or may not be true. Disparities between what happened in reality, and the logical model are what cause people to examine things and change their minds. Step 5 is completed by creating a table with three columns for examples. The first section contains the Conceptual Model's actions.

The second portion covers what actually occurs in reality, and the third piece describes what we can do to get reality closer to the logically defensible Conceptual Model.

Figure 11. A table shown the company's marketing dilemma.

Conceptual Model Activities	Real World	What could we do
Identify potential/ Current Customers & understand their needs	Performed on an <i>ad hoc</i> basis by the partners. No real systematic approach to identifying potential customers and elicitation of needs	1. Design develop and implement a more systematic approach
Review Current product/service portfolio	Portfolio developed on an as requested basis. No overarching strategy for product or service offerings	2. Establish a formal review process with in each business area and across the company as a whole
Create marketing material of products and services	Created on an as required basis. No consistent format, approach or message.	3. Agree a standard format for marketing material and develop materials for all current products and services
Develop new products and services	Performed on an as required basis for prospective customers	4. Establish business area planning for new products and services
Define unique competitive advantage for Company	Endless debates about what is unique about the company. It clearly is unique as our client base comprises mainly large multi-national companies or government organizations	5. Seek advice and guidance on how to define and agree our unique competitive advantage
Assess Competition	No systematic analysis performed	6. Don't bother - if our products and services are okay clients will come OR 7. Undertake a detail competition assessment exercise
Identify routes to market for each Customer (strategy)	To date a rather random approach	8. Perhaps need guidance on what is possible
Performing marketing activity to strategy	Not done – marketing passive	Do it!
Monitor Operational activities	Established quarterly marketing meetings	9. Make this element a formal item on the Meeting Agenda
Take Control Action	Nothing	10. Use the Marketing meeting actions to drive the control action

Source: www.conceptualmodelactions.com

Step 6: Define Changes that are both Desirable and Feasible: Figure 11 displays a table containing many alternatives for getting real-world reality closer to the Conceptual Model. All of the proposals would be implemented in a perfect world. The firm, on the other hand, is a functioning entity with limited resources (in terms of people and money).

We shall have pragmatically picked the order and timeframes for implementing (or not implementing) the recommendations. Although it looks to be a simple procedure, it is actually rather difficult.

Even though the change is based on the logic of the Conceptual Model, people will not always be motivated to adopt it. Because SSM was created for Human Activity Systems, it's important to remember that persons involved in the proposed change may have opposing viewpoints, even though the Conceptual Model's logic is irrefutable.

When change and culture collide, culture triumphs. This requirement for cultural feasibility can be challenging for scientists and engineers. They tend to exaggerate the role of logic while overlooking cultural factors that influence whether or not change occurs. This is one of the reasons why it's crucial to consider each Root Definition's Weltanschauung thoroughly.

Step 7 Take action to Improve the Problem Situation: Once we've identified the adjustments that are deemed "desirable" and "possible," we put out the effort to put them into action. This implementation will result in new systems that will have an impact on the larger system, resulting in further possibilities and issues; hence, the process will repeat itself.

The SSM fascinates me because of its technique. Rather than seeking for root causes to a problem, use reasoning to define what "good" is and work toward it. It differs slightly from previous "problem"-solving methodologies and thus provides a refreshing option. But I must confess that it has taken me so long.

4.4 Hard Systems Methodology

Teale et al (2003, p. 137) remark, "Hard System Analysis (HSA) allows us to look at components of the system in more depth." HAS is intrinsically linked to a company's goals and objectives. Every system, it is assumed, may be broken down into several subsystems. Teale and colleagues (Teale and colleagues, 2003). Hard system thinking, according to Kirk (1995), is useful for designing solutions that achieve the purposes of systems with a clear purpose and well-defined goals. This is a model with a specific aim that can be quantified, enabling for the development of mathematical models.

It is expected that the hard system approach is made up of a number of subsystems, with the components of those subsystems being able to be recognized and quantified in order to explain how they work. As a result, the entire system is made up of all subsystems. A wide range of approaches for describing and analyzing systems, such as diagramming techniques, structured flowcharts of the processes involved, and mathematical representations based on management science principles.

A hard system includes all of the following steps: awareness and commitment, constraints, aims and goals, alternative development, analyzing alternatives and model design, assessment, and execution. The purpose of the awareness and commitment stages is to raise problem awareness. Later, a consensus is formed on the study's goals and scope, and efforts are made to characterize the problem.

Then, in order to implement a solution, you must be committed, because a project without commitment would fail. During the constraints, objectives, and goals stage, relevant constraints and objectives are assessed to establish the type and direction of the organization. The organization's nature and direction are established, and this can be articulated in a hierarchy of assertions.

The mission statement is the primary reason for the organization's existence. These missions are the long and medium-term goals of the companies.

Furthermore, a company will create objectives and aims to achieve them. In the generation of alternatives stage, after setting the objectives, a feasible range of options is examined to handle the connected difficulties and satisfy the objectives. If no other options are available, the system, mission, and goals are reevaluated to create a review of the analysis.

Later, in the evaluating alternatives stage, we compare the options to a set of criteria that allow us to make a value judgment about the efficacy of the offered paths for achieving our goals.

Furthermore, the four Es can be used to categorize performance measures: effectiveness, efficiency, equity, and efficacy. Finally, throughout the model building, evaluation, and implementation stage, a systematic description and evaluation of the system is required in order to determine its credibility and evaluate alternate approaches to the objectives (Jennings & Wattam, 1998).

5. PRACTICAL PART

5.1 Description of KFC



THE HISTORY OF KFC Kentucky Fried Chicken (KFC) is a fast-food restaurant chain with its headquarters in Louisville, Kentucky. From 1997 to 2002, KFC was a totally owned subsidiary of Tricon, and since 2002, it has been a completely owned subsidiary of Yum! Brands. Poulet Frit du Kentucky, or PFK, is the name of the chain in the Canadian province of Quebec.

Chicken is sold in the shape of pieces, wraps, salads, and burgers at KFC. While KFC is most known for its fried chicken, company also sells roasted chicken, sides, and desserts. Outside of North America, KFC sells beef-based dishes such as burgers and kebabs, pork-based items such as ribs, and other regional fare. Because of KFC's success and uniqueness, the fried chicken fast-food restaurant's main recipe has been replicated by restaurant owners all over the world.

Colonel Harland Sanders created Kentucky Fried Chicken in 1952, while the idea for the company's fried chicken dates back to 1930. KFC, the abbreviated form of the company's name, was first used in 1991.

Furthermore, the firm continues to freely use the abbreviation KFC in its marketing. Around the world, the corporation is still known as KFC. Sanders, who was born and reared in Henryville, Indiana, has worked in a variety of fields throughout his life. In the middle of the Great Depression, Sanders initially sold his fried chicken at a gas station he operated in North Corbin, Kentucky, in 1930. The dining room was dubbed "Sanders Court & Café," and it was so popular that Kentucky Governor Ruby Laffoon bestowed the honorary title of Kentucky Colonel on Sanders in 1936, in acknowledgment of his contribution to the state's cuisine.

Sanders enlarged his restaurant to 142 seats the next year and purchased a motel across the street. When Sanders first opened his restaurant in North Corbin, he cooked his chicken on an iron pan, which took around 30 minutes to complete, which was far too lengthy for a restaurant. Sanders changed the cooking procedure for his fried chicken in 1939 to employ a pressure fryer, which resulted in a cooking time that was equal to deep frying.

Sanders developed what became known as his Original Recipe in 1940. He sold his properties and traveled across the country selling his chicken to restaurant owners after the intended route for what would become Interstate 75 skirted Corbin in the 1950s. Sanders signed franchise agreements that paid him five cents per pound of chicken sold. Pete Harman of South Salt Lake, Utah, was the first to accept his offer, and in 1952, the two of them opened the first "Kentucky Fried Chicken" restaurant. Kentucky Fried Chicken was offered in over 600 franchised locations in the United States and Canada by the early 1960s. The Kenny Kings network was one of the longest-running franchisees of the earlier Col. Sanders' chicken idea, as opposed to the KFC brand.

The company owned a number of Northern Ohio diner-style restaurants, the last of which closed in 2004. In 1964, Sanders sold the whole KFC franchise organization for \$2 million dollars. Since then, the company has been sold three times, most recently to PepsiCo, which incorporated it into its Tricon Global Restaurants division, which was spun off in 1997 and rebranded to Yum! Brands.

Lee Cummings, Colonel Sanders' nephew, grabbed his own Kentucky Fried Chicken franchises (along with his own chicken recipe) and turned them into Lee's Famous Recipe Chicken, his own "spin-off" restaurant network. Some of the earlier KFC locations have become well-known in their own right. A restaurant like this can be found in Marietta, Georgia. This business is known for its 56-foot (17-meter) tall chicken-shaped sign. The Big Chicken sign was created for Johnny Reb's Chick, Chuck, and Shake, a fast-food restaurant that used to be on the site. Locals and pilots in the Atlanta area frequently utilize it as a travel reference point.

Products

Colonel Harland Sanders' "Original Recipe" of 11 herbs and spices is used to season pressure-fried on-the-bone chicken pieces at KFC. The chicken is often offered in two- or three-piece individual portions, or in a family-size cardboard bucket containing six to sixteen pieces of chicken. Each chicken is split into nine distinct cuts in nations that follow Colonel Sanders' approach, such as Canada and the United Kingdom (two drumsticks, two thighs, two wings, two breast pieces, and one keel); however, the United States currently utilizes an eight-piece cut. In a two- to four-minute operation, individual KFC locations hand-bread the food with wheat flour and seasonings.

After that, it was pressure cooked in oil for seven to ten minutes at 185 degrees Celsius (depending on the country). The chicken is then allowed to rest for 5 minutes before being placed in the warming oven to cool completely.

In different sections of the country, frying oils such as sunflower, soybean, rapeseed, and palm oil are used.

According to a KFC official, the taste of the chicken varies by location and is determined by the type of oil used and whether the chicken was corn-fed, or wheat-fed. KFC sells chicken sandwiches (such as the Zinger and the Tower), wraps ("Twisters" and "Boxmasters"), and a variety of finger snacks in addition to its core chicken on the bone offering (such as crispy chicken strips and hot wings). Popcorn chicken, which is made up of bite-sized bits of fried chicken, is one of KFC's most popular items. Chicken nuggets are sold in Australia, Belarus, Malaysia, and South Africa, among other places. McCormick & Company, a long-time partner in new product development, is KFC's principal supplier of sauces, seasonings, and marinades.

Due to the company's previous relationship with PepsiCo, most territories supply PepsiCo products; however, Barbados, Greece, Mexico, New Zealand, the Philippines, Romania, South Africa, and Turkey, which stock Coca-Cola drinks, and Aruba, which stocks RC Cola from the Cott Corporation, are exceptions. The Inca Kola, a famous drink in Peru, is available for purchase. The Krusher/Krushem frozen beverage line, which debuted in 2009 and includes "genuine parts" including Kit Kat, Oreo, and strawberry shortcake, is now available in over 2,000 locations.

The 11 herbs and spices

The recipe isn't patented since patent law necessitates public disclosure of an invention and only gives protection for a finite period of time, but trade secrets can remain the intellectual property of their owners indefinitely. A signed copy of the recipe, as well as 11 vials holding the herbs and spices, are kept in a safe within a vault at KFC's Louisville headquarters.

To keep the recipe secret, Griffith Laboratories produces half of it before giving it to McCormick, who adds the other half. In 1999, a couple who bought Colonel Sanders' previous home discovered handwritten notes claiming to be the secret recipe.

KFC had planned to sue the couple to prevent the notes from being auctioned, but by early 2001, it had dropped the suit, arguing that the scrawled notes were "nowhere near" to the original recipe.

Joe Ledington of Kentucky, Colonel Sanders' nephew by marriage, claimed to have uncovered a handwritten copy of the original KFC fried chicken recipe in an envelope in a scrapbook. Staffers from the Chicago Tribune conducted a culinary test of this recipe in August 2016, claiming that after a few attempts, they were able to make fried chicken that tasted "indistinguishable" from KFC chicken with the addition of the MSG flavor enhancer Ac'cent.

Equipment

KFC used to fry its chicken in covered cooking pans on the stovetop. The L S Hartzog created "KFC 20-Head Cooker," a massive appliance that cost \$16,000, was the officially approved type in the 1960s. The Hartzog type lacked an oil filtration system, requiring human filtering, and the pressure fryers occasionally exploded, causing injuries to staff. Winston L. Shelton, an inventor and engineer, created the "Collectramatic" pressurized fryer in 1969 to solve KFC's difficulty of speedily frying chicken to satisfy rising customer demand.

Colonel Sanders' strict standards were met by the Collectramatic, which used precise time and temperature controls and self-filtered the frying oil. KFC's then-Vice President of Purchasing, Fred Jeffries, said that the concept was important in the company's rapid growth and success: Without the Collectramatic, KFC would not have been able to develop as quickly as it did.

With the pots, stores were making approximately \$200,000 per year on average... But without Win's fryer, they would never have made the \$900,000 per year they did. With great engineering thought, he (Shelton) helped create the stage for that.

Despite the fact that a number of franchisees purchased the Collectramatic, which had Colonel Sanders' support from 1970 onwards, John Y. Brown Jr. "Though the old pots were terribly dangerous, at least we knew they worked!" he said, giving franchisees implicit license to use the older L S Hartzog fryer. I was mostly concerned that these new fryers might fail in the middle of a shift. Brown told franchisees that using the Collectramatic was a violation of their agreements. Brown was adamant about the issue until he found that his father, John Y. Brown Sr., was involved., who owned many KFC locations, was employing the Collectramatic successfully in every one of them.

After Heublein purchased KFC, Hartzog was acquired, and the contract was dissolved, the situation was finally addressed. The Collectramatic has been a certified pressure fryer for KFC since 1972. KFC has been switching from Collectramatic cookers to pressure fryers made by Henny Penny, who supplies KFC with various equipment, since 2013. Increased load capacity, automated oil filtration, and longer oil life are all features of the 'Velocity' series of pressure fryers.

5.2 Description of Amrest



AmRest is a casual dining, fast-food, and coffee shop chain based in Madrid, Spain, with locations all throughout Europe. The company operates about 2300 outlets, mostly KFC, Pizza Hut, Burger King, and Starbucks franchisees, as well as its own restaurant brands. Among other nations, AmRest has locations in Spain, Poland, France, Germany, Russia, the Czech Republic, Hungary, Romania, Bulgaria, Slovakia, Slovenia, Croatia, Serbia, and China. Since 2005, AmRest has been listed on the Warsaw Stock Exchange, and since 2018, it has been listed on the Madrid Stock Exchange, with Mexican investor Carlos Fernández González as the largest shareholder.

American Restaurants Services was founded in 1993 by Henry J. Donald M. Kendall, Sr., Donald M. Kendall, Jr., and Christian R. Eisenbeiss. McGovern, Donald M. Kendall, Sr., Donald M. Kendall, Jr., and Christian R. Eisenbeiss. The company originally held the franchise rights to operate Pizza Hut and KFC stores in western Poland. It expanded its activities outside of Poland in 1998, when it acquired Yum! Brands' KFC and Pizza Hut franchises in the Czech Republic.

AmRest Holdings was formed in 2000 as a joint venture between American Restaurants and Yum! Brands, and in 2001 it purchased International Fast Food Polska, a Burger King franchisee in Poland. Six of the 23 Burger King restaurants acquired were closed, while the remaining 17 were rebranded as KFC. In 2005, In the Czech Republic and Poland, the company purchased the remaining Yum! franchises, making it the exclusive KFC and Pizza Hut franchisee in those countries. In 2006, AmRest bought the rights to seventeen KFC and Pizza Hut stores in Hungary and rebranded them as Fresh Point and Rodeo Drive.

Yum withdrew from AmRest as a shareholder when the firm went public in April 2005. AmRest purchased eight Big Food restaurants in the Czech Republic in May 2005 and renamed them as KFC. In 2007, AmRest opened its first new Burger King restaurant in Poland, as well as the first KFC sites in Serbia and Bulgaria, and partnered with Starbucks to open stores in Poland, the Czech Republic, and Hungary. In 2008, the firm agreed to open a Burger King in Bulgaria and purchased many outlets in Russia. AmRest established the first Starbucks location in Prague in January 2008. In 2008, the firm opened its first Starbucks in Poland.

In May 2008, AmRest bought 80 percent of Apple Grove Holding, the second largest Applebee's franchisee in the US. A renowned private equity firm, Warburg Pincus, offered to invest roughly 300 million pounds in AmRest in exchange for a 24.99 percent ownership in April 2010. AmRest also opened Hungary's first Starbucks in 2010. AmRest announced the acquisition of Restauravia, a Spanish firm that operates 30 KFCs and over 120 La Tagliatella Italian Casual Dining Restaurants, in April 2011. AmRest said that La Tagliatella would be one of the key catalysts of the company's global expansion.

However, AmRest's attempts to expand the La Tagliatella brand of restaurants outside of Spain since 2012 have failed. China, India, and the United States all had locations that were soon shut down. In 2017, the French company that handles the group's five restaurants lost 2.9 million euros, bringing the total loss since 2012 to 11.7 million euros. On June 7, 2012, AmRest LLC, which owned 102 Applebee's locations in the United States, was sold to American Apple Group, Applebee's largest franchisee.

AmRest bought the Blue Frog and Kabba restaurant brands in China on December 14, 2012. In March 2015, AmRest expanded the number of countries in which it runs Starbucks by acquiring the coffee shops managed by Greek Marinopoulos Coffee in Romania and Bulgaria. In April 2016, AmRest paid 41 million euros for 144 Starbucks coffee outlets in Germany.

The company relocated its headquarters from Poland to Madrid, Spain, in 2017. In July 2018, AmRest purchased the Sushi Shop restaurant business in France. Burger King returned to Slovakia after AmRest opened a location in November 2018. AmRest built the first Starbucks Cafe in Serbia in April of this year. It also brought Burger King back to Romania by launching its first restaurants in Bucharest after a seven-year hiatus, with only the airport branch operating.

Our Purpose

Our winning formula is service.

Our Vision

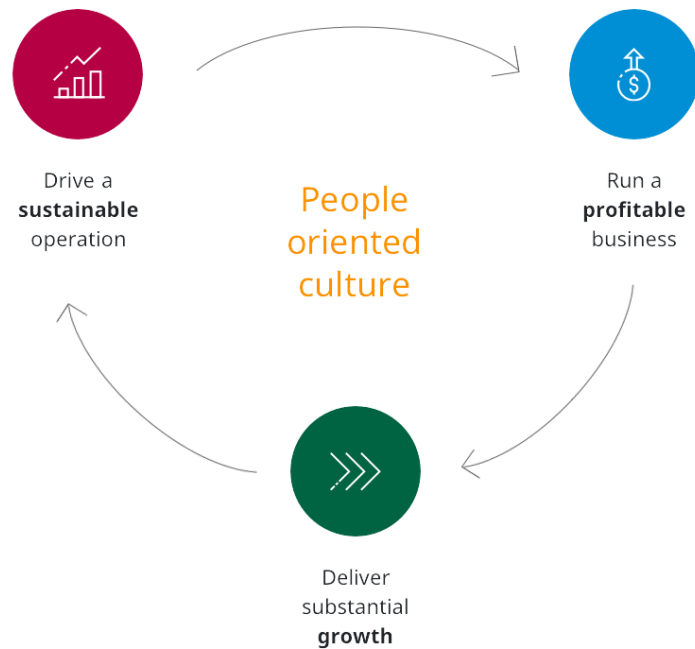
To become the European leader in the restaurant sector who inspires the rest of the world.

Our Mission

Our scalable and sustainable brands thrive by winning our guests' hearts via distinctive service, product, and experience in our restaurants, delivered by dedicated AmRestees.

Our Strategy

Our company model is built on a strong leadership team that creates scalable, long-term brands. We think that a robust portfolio of multi-brand restaurant operations, a strong franchise network, a well-integrated supply system, and cutting-edge digital and delivery technologies will enable long-term sustainable growth for all of our stakeholders.



Source: www.AmRest.com

All aspects of our plan are intertwined: each one is fueled by the previous and propels the next. This complete strategy helps us to provide an excellent experience to our guests, employees, investors, and partners while also earning their trust.

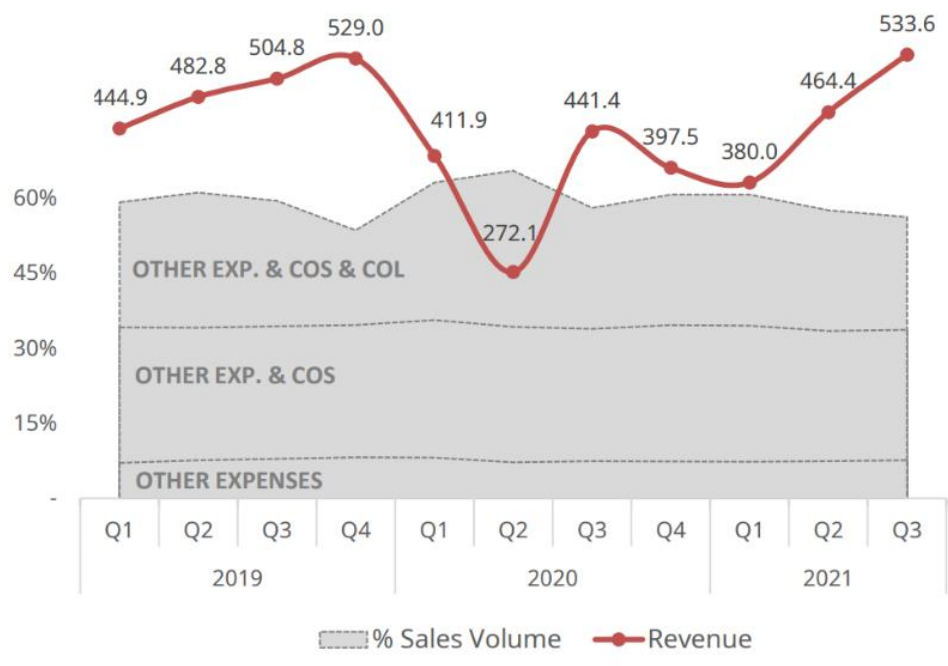
During the Covid-19 there is some ups and downs in the sales and revenue until 2021-

Active management of cost pressure

AmRest has efficiently managed costs and expanded margins despite pricing pressure.

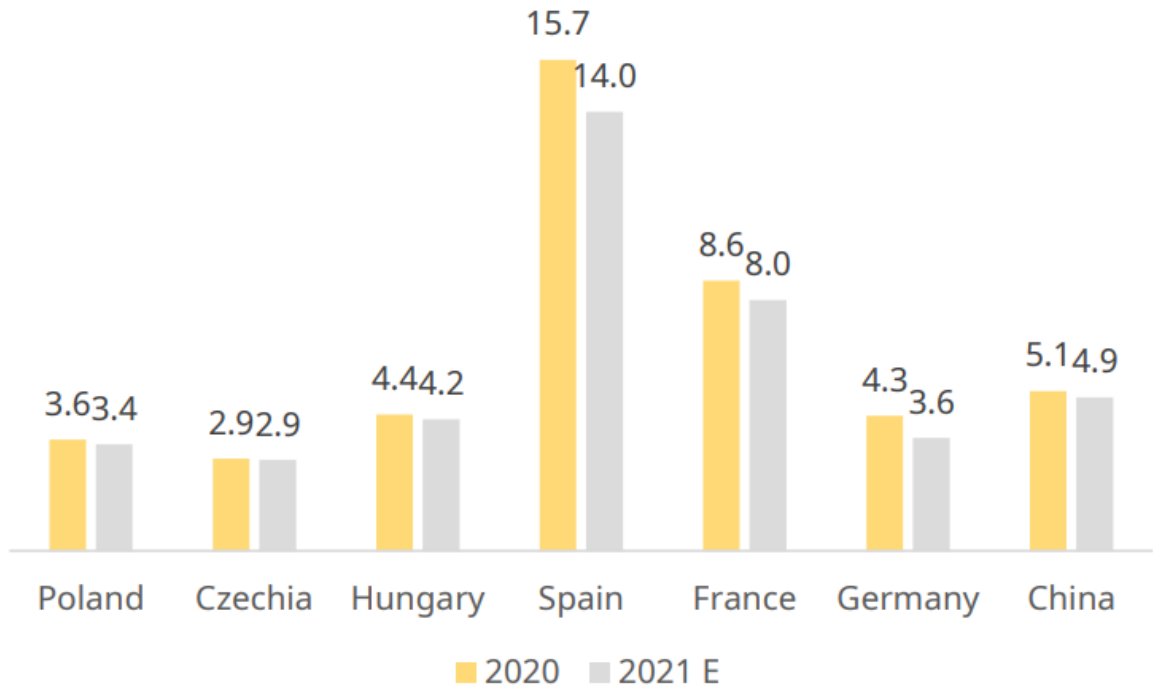
Cost of labor (COL) Sales leverage clearly benefited a key component of the cost base.

Cost of sales (COS) & Other Exp. Excellent credentials in terms of cost management efficiency. Even during the "hard lock down," the percentage cost contribution remained steady.



Source: www.amrest.com

Unemployment % of total labor force

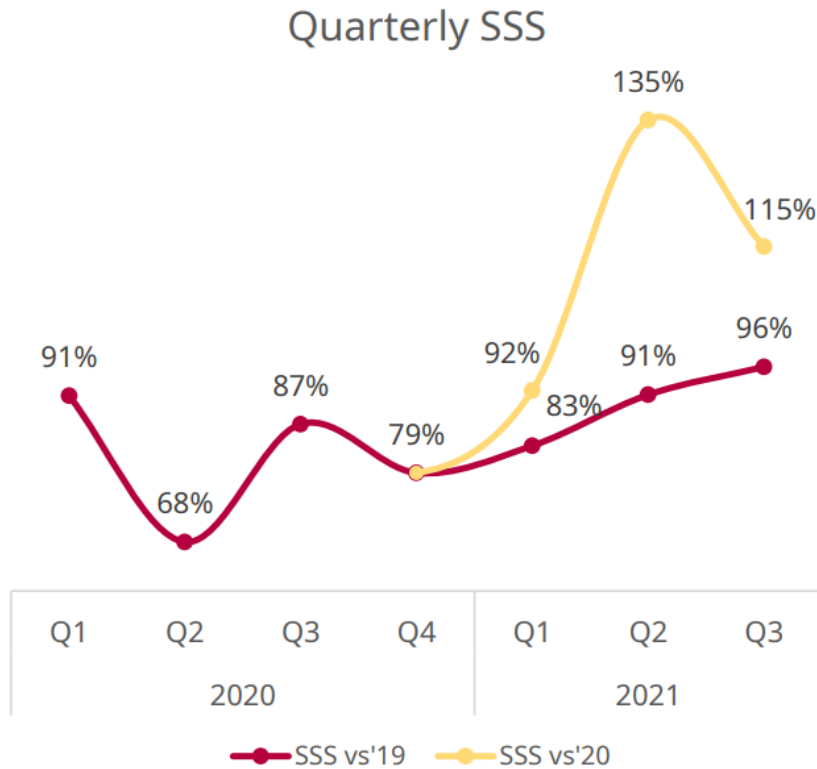


Source: The world bank

Many countries' labor markets are tightening during Covid-19. Our dedication to the AmRestee has turned into a strength.

2019 to 21 Revenues highlights

Sales are at an all-time high for the quarter. These data support AmRest's business model, which is focused on continual innovation and, most importantly, service excellence.



Source: www.amrest.com

Franchise and development agreements are the primary sources of future liabilities for the Group. YUM! and its subsidiaries, KFC and Starbucks Coffee International, Inc. have franchise and development agreements with the group. The Group is required to meet certain development commitments as well as maintain each brand's identity, reputation, and high operating standards under these agreements. During Covid-19, there is a significant disparity in sales.

That is why the agreements, as well as other future obligations, are included in The Group's consolidated financial statements for the fiscal year ending 31 December 2020.

The Group is reviewing its development plans in light of the COVID-19 pandemic regulations that have hampered restaurant operations.

5.3 Problem of KFC under Covid-19 at Ceskamoravaska

My research specifically is based on one of the branches of KFC which is a part of the AmRest Group. AS you know that KFC business is delivering eat-in services, and the pandemic's impact on AmRest continues to grow. Following the closure of one-third of its global restaurants, AmRest has temporarily suspended a number of KFC outlets in Europe, as the pandemic's impact on the company continues. Previously, AmRest had stated that it may experience a loss from operations in the first quarter of this year as a result of the pandemic affecting its sales and production capacity, and that the Brands had temporarily closed approximately one-third of its restaurants across Europe.

According to the corporation, since the Spring Festival break, sales of this branch that are still open have decreased by 40 to 50 percent year over year due to fewer business hours and a lower number of customers. To gain a better understanding of how the Covid-19 pandemic affects the catering business, some of the vital problems are appeared in KFC which is being described one by one under below-

Main sub-problems description

Some of the problem which is appeared in the KFC during Covid-19 are selected as a more important.

KFC's reduced advantage as a multi-national company

The global spread of the Covid-19 outbreak has revealed the volatility of the global supply chain and distribution network. Previously, international firms such as KFC were able to organize production and sales around Prague via the global supply chain, lowering manufacturing costs by leveraging their comparative advantages.

Thanks to integrated operations and rapid response at the supply chain, international fast-food companies like KFC enjoy amazing ease and transparency when coordinating their materials, information, and values.

KFC's just-in-time system was impeded by the pandemic, and the Czech governments tightened their controls on transportation and people flow. The European division of labor is becoming even more convoluted in the age of economic globalization, and supply chain and value chain businesses are becoming increasingly intertwined. The halted process of surrounds is one of the great obstacles that KFC faces.

Production standstill in one country will influence the entire industrial chain, therefore the stalled process of surroundings is one of the enormous challenges that KFC faces. Following the advent of the pandemic, KFC has lost its advantages in the globalization process, whether in terms of food costs, transportation charges, rent, or salary. Simultaneously, Czech governments issued decrees restricting the import and export of goods or imposing exit and entry restrictions, all of which are bad news for the Ceskomoravské KFC outlet.

KFC's market demand is reduced

The spread of the epidemic around the world is having a direct influence on basic economic sectors of the Czech Republic. Consumption, investment, and trade in the Czech Republic are all stifled, and aggregate demand is declining. The quarantine processes have a direct influence on family consumption, and KFC is no exception. Consumers who enjoyed eating at KFC outlets before to the outbreak were forced to follow government orders and stay at home.

Meanwhile, many were gloomy about future work chances and earnings due to the pandemic's impact. As a result, consumer confidence measures are falling precipitously, approaching the levels seen during the 2008 financial crisis. KFC's consumer base is rapidly dwindling as a result of these causes.

Declining Consumers' Confidence

Consumers of fast-food restaurants have been concerned about the future since the onset of the Covid-19 epidemic. The majority of respondents expressed anxiety about KFC's future, with those who felt panicked ranking in terms of numbers.

They are worried of losing their jobs, becoming sick, or being robbed by rioters, and all of these fears and concerns are causing people to cut back on their spending habits as they begin to conserve money. Many consumers who work in restaurants, movies, and shopping malls are losing their employment as a result of the government's widespread lockdown in the service industry. As a result, their income expectations and trust in the economy are declining. When potential customers become anxious about their futures and begin to deposit money, this phenomenon will be tremendously harmful to fast-food companies like KFC.

Furthermore, it is generally known that fast food restaurants, such as KFC, are crowded places where people sit close to one other and share their meals, making the establishment a high-risk location for viral transmission.

Selection of the problem to solve

Among these problems I have been selected one of the problems, which is declining consumer confidence, I am going to figure out the way to solve the problem through some of the step of Soft System Methodology.

Declining Consumers' Confidence

Since the outbreak of the Covid-19 virus, fast-food customers have been anxious about the future. Figure 3 demonstrates that the majority of respondents expressed anxiety about KFC's future in the Czech Republic, with those who felt panicked ranking highest in terms of numbers. People are afraid of a pandemic, becoming sick, or being robbed by rioters, and all of these fears and concerns are prompting them to cut back on their purchasing habits in order to save money.

As a result of the government's extensive lockdown in the service industry, many consumers who work in restaurants, theaters, and shopping malls are staying at home. As a result, their enjoyment is declining. When potential customers become anxious about their futures and stay at home, this phenomenon will be tremendously harmful to fast-food companies like KFC.

Figure 3 An investigation on the social psyche of the pandemic's victims

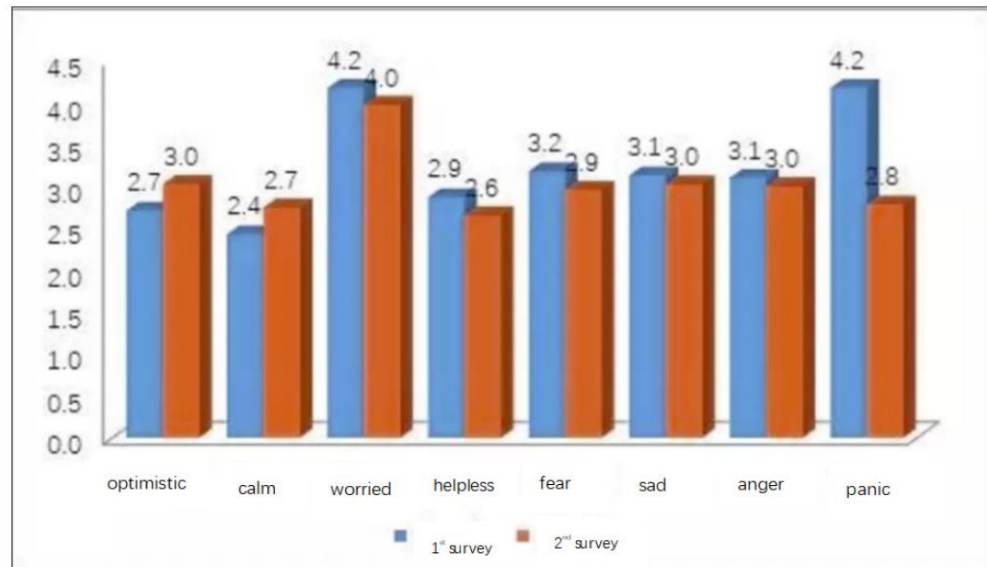


Figure 3. Investigation on social mentality during the pandemic

Data source: Institute of Sociology, Czech Academy of Social Sciences, research center for social psychology.

Furthermore, fast-food restaurants, such as KFC, are well-known for being crowded places where people sit near to one another and share their meals, making them a high-risk venue for viral transmission.

I am going to solve this problem through soft system methodology that will help to figure out the way to get back the consumer confidence as well get back the previous financial situation. Which is being stated under of SSM approach to solve these Problems.

5.4 SSM approach to solve these problems

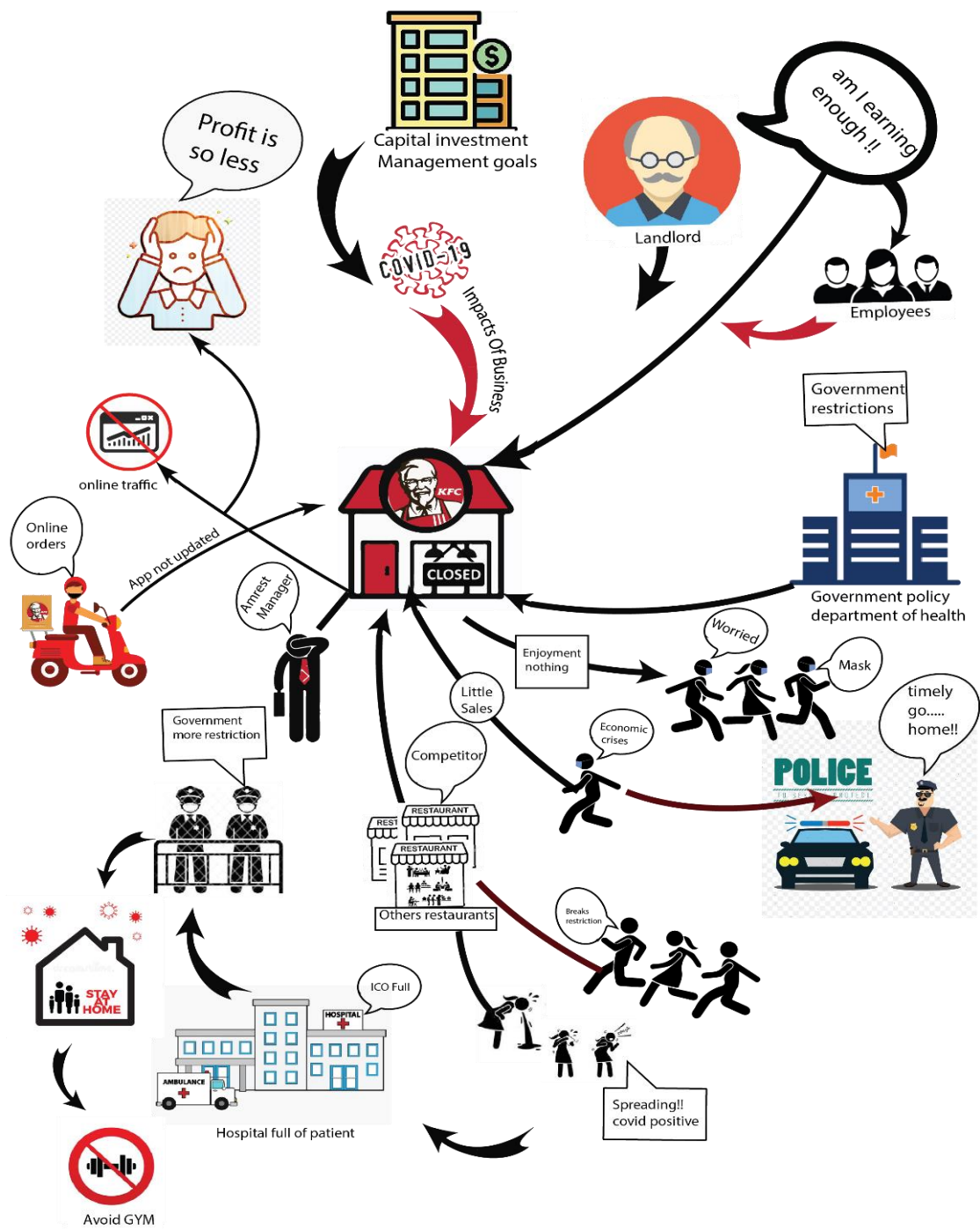
It's a method of modeling business processes that may also be utilized to solve general problems and manage organizational change. The principal application of SSM is the examination of complex circumstances including opposing perspectives on the problem definition.

In such situations, SSM can help by enhancing communication among all parties involved. This makes it possible to reach an agreement that is acceptable to all parties involved. SSM also doesn't provide you with a design template; it's more of a hunt for the best solution. It makes use of everyone concerned in the situation's knowledge and experience.

SSM's purpose is to bridge the gap between the "actual" world and the participants' mental conceptual world. The approach is being started from Rich picture of the problems under below. Which aids in comprehending the organization's surrounding challenges during Covid-19.

Rich Picture

Situation during Covid-19 (Author- Md Sharif Ahmed)



Root definition

A root definition is a transformation process that takes an entity as input, alters or transforms it, and outputs a new form of the thing. Tables below offers a prescription for building KFC transformation methods as well as instances of transformations typical of a golf course operation. As you can see, depending on the world perspective used, these transformations may differ substantially.

INPUT	OUTPUT AND RECOMENDATION	AS VIEWED FROM THE EYES OF
Eat-in service	Reduced eat-in service	Planner
Selling takeaways	More channels	IT engineer
Delivering the food	Sanitary issues	Equipment industry
Deliveryman	Wear masks	Equipment industry
Food package	will not worry	Equipment industry
stringent sanitation management measures,	Good social image	Restaurant management
All the seats in the restaurant should be kept at least 1 meter apart.	Maintain social distance.	Environmentalist
implementation of sanitation management measures	reduction of the operating costs of restaurants.	Restaurant management
Quality meals	Build confidence	Kitchen cook
Sales Promotion	Impress customers	Manager

Table 1. One to one transformation involving different world views.

C.A.T.W.O.E

CATWOE Analysis is a technique for determining a stakeholder's point of view and the impact that viewpoint will have on the business change's direction.

C-Customers: Due to the new coronavirus outbreak, most customers had begun to shun fast-food by the end of the year in order to continue precautionary measures. Furthermore, revenue has been hampered by operational disruptions in the KFC, as well as disruptions in the supply chain caused by the COVID-19 epidemic. The future of KFC establishments is causing widespread concern among customers.

The majority of respondents voiced concerns about the future, and those who are panicked also scored first in terms of income expectations and trust in the economy, which are both on the decline. When potential customers become anxious about their futures and begin to deposit money, this phenomenon will be tremendously harmful to fast-food companies like KFC. Furthermore, it is generally known that fast food restaurants, such as KFC, are crowded places where people sit close to one other and share their meals, making the establishment a high-risk location for viral transmission.

A-actors: KFC members are the lifeblood of company, and we put their health and safety first. Continue to work on making food available securely and with little contact through drive-thru, carryout, curbside pick-up, if appropriate, and Contactless Delivery after closely monitoring COVID-19-related advancements. On the other hand, Covid-19 can spread to customers through personnel. So that we are continuing to improve and refine our procedures based on the latest recommendations and increasing customer expectations, including adopting physical separation measures in restaurants where possible, thanks to our worldwide scale and industry knowledge.

Restaurant staff should wear personal protective equipment (PPE).

Protective facial coverings: As an extra layer of protection, KFC has begun requiring restaurant team members to wear non-surgical grade face masks or covers in all of our Czech Republic locations, as well as globally, where facial coverings are suggested or enforced by local health authorities. We're also allowing restaurant employees to use their own cloth face masks until we can get enough non-surgical grade face masks to serve the entire system.

T-transformation: The Covid-19 epidemic has slowed the process to some level; many KFC locations and manufacturers are experiencing issues like as decreased profits and challenging operations. The most immediate consequence of all of these effects is a reduction in consumer income expectations, as consumers are concerned about economic progress when there is a possibility of an economic disaster. As a result, in addition to the fear of becoming infected, people would rather save money than spend it on restaurants due to lower income expectations and economic uncertainty. So that how can I impress the customer towards the KFC that's why I am going through some of the procedure which is rich picture that is going to express problem and some of the step, selection of problem until conceptual model which is going to solve the problem as well get back the customer to the restaurant with the implementation of this methodology.

W-worldwide view: More than 600 million individuals have been infected with the Covid-19 pandemic since it first broke out in Wuhan, China, in early 2020, and the global death toll has surpassed 700,000. The epidemic has a tremendous influence on the worldwide economy, in addition to posing serious threats to people's lives. In actuality, the impact on the economy is mostly due to a loss of clients in the service industry and a reduction in consumer income expectations.

According to store output as fast as possible and grow customers trust in the economy, the governments have employed harsh control measures, such as issuing various requiring everyone to stay at home and keep social distance between each other.

With the spread of the outbreak, the British government has taken a number of steps to prevent the virus from spreading further. People are urged to work from home and avoid unnecessary travel, and these initiatives have aided these countries in controlling the spread of the epidemic and resuming production.

Many restaurants and bars have remained open for clients in nations where the outbreak has been properly handled, and consumers have confidence in the hygienic conditions at these establishments. However, the epidemic has not been adequately contained in other countries. In the United States, the number of verified COVID-19 cases and death tolls had been climbing, with no indications of the pandemic abating until July.

According to the current number of proved Covid-19 cases that have been disclosed, confirmed cases in America accounted for 1/4 or more of all confirmed cases worldwide, with the death toll contributing for around 23% of the company's entire mortality toll. As a result of the globalization trend, fast food businesses can be more flexible in their operations. For example, they could open stores in nations or regions where there is a high demand for fast food. All of these, as well as the globalization trend, can assist the fast-food business.

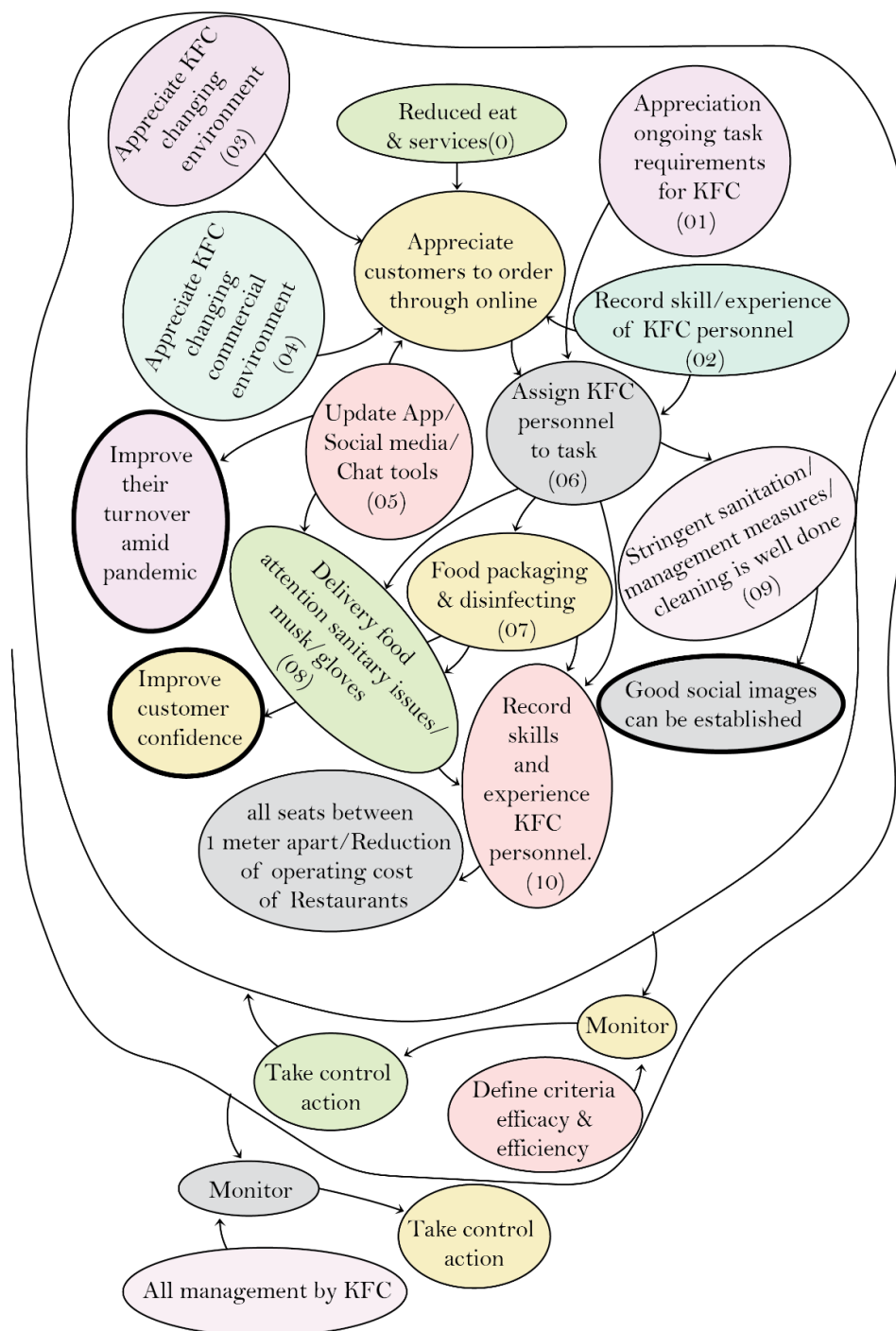
O-owner: At AmRest, we quickly translate words into actions. We know success is achievable if we conduct our work in sustainable way. That is why we listen carefully to our stakeholders; to make sure we are making the right decisions. During The Covid-19 KFC faced a lot of problem and decreased sell 20% compared to previous year so that KFC looking for sustainable way to solve the problem so that we are going through some of the process that can solve the problem of KFC which will be conducted by owner of KFC in the real field.

E-environment: KFC (Kentucky Fried Chicken) is a fast-food restaurant chain. The pandemic's impact on AmRest continues to grow. Following the closure of one-third of global restaurants, it is claimed that AmRest has temporarily closed a number of KFC outlets around the world as the company deals with the effects of the epidemic. The pandemic has impacted its sales and production capacity, and AmRest has temporarily closed approximately one-third of its restaurants across the EU, according to the company.

According to the corporation, since the Spring Festival vacation, same-store sales of the restaurants that are still operating have been cut by 40 to 50 percent on a year-on-year basis due to shortened business hours and a lower number of consumers. So that we have been using soft system methodology to solve the problem which is hold some of the procedure that help to figure out the problem and implement the solving model in the real field.

Conceptual model - solution of problems

Conceptual model this is how it can conduct (Authors- Md Sharif Ahmed)



This model is divided into two parts: an operational model and a model that is monitored at two separate levels. Task 6 is the operational system's main activity (Assign KFC personnel to tasks). However, in order to complete this assignment well, you must have a high level of understanding, which is covered in tasks 1 through 5. We must be aware of the changing environment at KFC as well as the ongoing work requirements of the organization. These requirements meet a knowledge need in order to entice customers to shop online. We also need to know about the experiences of current and new KFC employees. When those conditions are completed, the task assignment is complete.

This approach uses two layers of monitoring but note how this method adheres to the "metrics, monitoring, and control action" recommendations. The KFC group keeps an eye on the operating system and uses efficacy and efficiency as performance indicators. The management level performs the second level of monitoring, with cost effectiveness as the performance indicator.

Evaluation and selection of socially feasible and economically good or optimal solution

In order to present condition, the virus spread in first level among people who are really in close to each other if they do not to maintain social distance (COVID-19 Spread). The person who is infected his coughs, sneezes, speaks, sings, or breathes, the virus spreads through microscopic which is kind of liquid particles from the person mouth or nose.

When contagious things in the flow of air are taking through breathed within range (this is called as short-range aerosol or short-range airborne transmission) or when contagious things go to in contact with the eyes, nose, or mouth, others individual can have attracted through the virus (droplet transmission) (COVID-19 Spread). This is how people can become infected by touching their eyes, nose, or mouth after close contacting or the things polluted with the virus (WHO)

Based on the above analysis, I'm going to propose a few alternative strategies for the fast-food sector to reopen in the post-epidemic period. To begin with, reduced eat-in service is recommended for the catering industry, and fast-food restaurants should explore more channels for selling takeaways, such as encouraging consumers to order food online through social media, app, and chat capabilities. Online meal booking is quite easy, and more significantly, it allows you to preserve social distance by ordering food online. Furthermore, it aids fast-food establishments in increasing their turnover in the midst of the pandemic. However, when delivering the food, fast food restaurants should pay attention to sanitary issues and ensure that the take-away deliveryman wear masks and gloves, as well as sanitize the food package, so that customers are not concerned about the safety of the take-away Conferences 218, 02005 (2020).

Second, fast food restaurants should employ strict sanitation management methods and ensure that cleaning work is completed properly, as this would help them develop a positive social image and regain consumer confidence. Furthermore, quick food establishments are encouraged to operate when they are properly prepared. To ensure that the restaurant is clean and sanitary, for example, specific people should be assigned to disinfecting and cleaning tasks.

It is advised that all restaurant seats be kept at least one meter apart or that segregation boards be erected between the seats, as these measures can effectively help maintain social service, implement sanitary management measures, and minimize restaurant operating costs. However, because the consequences of the Covid-19 outbreak on countries all over the world are so varied, a microcosmic study of the fast food industry in a single market is required to have a better understanding of the economic performance during the pandemic.

Monitoring a System.

Three activities are involved in monitoring the operational system. Define a performance metric:
We can measure the operating system using any or all of the three E's.

Efficacy – If it is continue based on above analysis like reduced eat in services, wear mask while delivery the food to customers and maintain distance between customers so it is going to help to increased profits during pandemic.

Efficiency – According to the WHO evidence there is some of the way to spread out the Covid-19 between people so based on this evidence

I proposed some of the equipment like mask, sanitation, stringent measurement that can help to achieve efficiency.

Effectiveness – According to the (WHO), data suggests that the virus can spread in minute liquid particles from an infected person's mouth or nose when they cough, sneeze, speak, sing, or breathe. So that I am suggesting people to use mask and 1 meter's distance between people, so I think it is going to meet the goals of KFC.

Monitor the operational system's operations in compliance with the set metrics. Take command of the situation: The results of these metrics should be used to define and take action to govern the operating system. The three E's mentioned above, however, are not the only metrics that can be employed. Many businesses will employ criteria such as economic, ethical, elegant, and other metrics that will vary depending on the context of the work being done.

6. CONCLUSION

During Covid-19, the services, and products of Kentucky Fried Chicken (KFC) have a significant impact on consumer satisfaction. My findings show that most of the consumers are not satisfied with the current services and KFC products because customers are getting delivery late and KFC could not update the online apps fast during Covid-19. Furthermore, the majority of customers had heard of KFC through social media. This showed the strength of the internet and social media in allowing individuals to learn new things quickly. As a result, it is preferable to create a social media and web app in order to increase order volume. Customers are more likely to choose KFC's fried chicken than KFC's burger because they prefer its excellent taste with spicy and unique flavor.

On the other hand, KFC's diminished advantage as a multinational corporation, With the global spread of the Covid-19 outbreak, the global supply chain and distribution network has become increasingly unstable.

In the past, international firms like KFC were able to organize production and sales around the world through the global supply chain. As well as KFC's market demand is reduced, the spread of the epidemic around the world is having a direct impact on many countries' basic economic sectors.

Global consumption, investment, and commerce are being repressed, and global aggregate demand is declining. KFC is no exception, as quarantine procedures have an immediate influence on family consumption. Consumers who enjoyed eating at KFC outlets before to the outbreak were forced to follow government orders and stay at home.

At last, Declining Consumers' Confidence, Consumers of fast-food restaurants have been concerned about the future since the onset of the Covid-19 pandemic. They are worried of losing their jobs, becoming ill, or being looted by rioters, and all of these fears and anxieties would cause individuals to consume less. In general, the following conclusions are reached from the above analysis.

First and foremost, it is clear that the pandemic is having a significant impact on actual economies, with significant economic losses occurring as a result of the specific vulnerability of fast-food businesses, which is unavoidable. Second, the reasons for such vulnerabilities include a slowing of globalization, lockdowns, decreased consumer confidence in economic prospects, and unpleasant sentiments among them, among other things.

Based on the analysis, several potential remedies are presented, including providing an online meal ordering service, implementing sanitary management techniques, and lowering restaurant running costs. Nonetheless, the current analysis has significant flaws because the effects of the Covid-19 pandemic on countries around the world are highly different, so a microcosmic study of the fast-food business in a specific market is proposed to obtain deeper insight into the economic performance under the epidemic.

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