

Standardization of the driver certification processes of the company Bebidas Mundial S. de R.L. de C.V.

Estandarización de los procesos de certificación de choferes de la empresa Bebidas Mundiales S. de R.L. de C.V.

ROBLES-ARIAS, Isela Margarita†, SO-FELIX, Stephany, ROSAS-ESTRADA, Kenya Patricia and VALDEZ-GUERRERO, Raquel

Tecnológico Nacional de México / Instituto Tecnológico de la Paz, La Paz, Baja California Sur, Boulevard Forjadores De Baja California Sur 4720, CP: 23080, México.

ID 1st Author: *Isela Margarita, Robles-Arias* / **ORC ID:** 0000-0001-5164-156X, **CVU CONACYT ID:** 404596

ID 1st Co-author: *Stephany, So-Felix* / **ORC ID:** 0000-0001-5679-7993

ID 2nd Co-author: *Kenya Patricia, Rosas-Estrada* / **ORC ID:** 0000-0003-2486-6127, **CVU CONACYT ID:** 1116605

ID 3rd Co-author: *Raquel, Valdez-Guerrero* / **ORC ID:** 0000-0003-0972-0189, **CVU CONACYT ID:** 407004

DOI: 10.35429/EJRP.2021.12.7.22.33

Received January 20, 2021; Accepted June 30, 2021

Abstract

The purpose of this work is to standardize the certification processes for delivery and administrative drivers under the CESVI Standard at Betides Mondial's, S. de R.L. de C.V. To fulfill this objective, a mixed investigation was proposed with a design of the Deming methodology "the PDCA cycle". The specific objectives were to carry out a diagnosis to the Human Capital area to know specific data of the driver training, determine the number of drivers who are certified or not and have a driver's license, design a procedure manual that allows effective control of the certification process and participate in the current awareness campaign. The result was the standardization of the certification process, the standardization manual, Excel database, the credentialing of drivers, strengthening the "Safe Fleet" campaign

Process standardization, Certification, Drivers

Resumen

El presente trabajo tiene como propósito estandarizar los procesos de certificación de choferes de reparto y administrativos bajo la Norma CESVI en Bebidas Mundiales, S. de R.L. de C.V. Para dar cumplimiento a este objetivo, se planteó una investigación mixta con un diseño de la metodología del Deming "el ciclo PDCA". Los objetivos específicos fueron realizar un diagnóstico al área de Capital Humano para conocer datos concretos de las capacitaciones a choferes, determinar la cantidad de choferes que están o no certificados y cuenten con licencia de manejo, diseñar un manual de procedimiento que permita llevar un control eficaz del proceso de certificación y participar en la campaña vigente de concientización. Se logró como resultado la estandarización del proceso de certificación, el manual de estandarización, base de datos en Excel, la credencialización de choferes, fortalecer la campaña de "Flota Segura"

Estandarización de procesos, Certificación, Choferes

Citation: ROBLES-ARIAS, Isela Margarita, SO-FELIX, Stephany, ROSAS-ESTRADA, Kenya Patricia and VALDEZ-GUERRERO, Raquel. Standardization of the driver certification processes of the company Bebidas Mundial S. de R.L. de C.V. ECORFAN Journal-Republic of Peru. 2021. 7-12:22-33.

† Researcher contributing first author.

Introduction

It is well known that, in the workplace, the safety of all workers is of paramount importance for any company. Especially in a first-class organisation of the magnitude of Bebidas Mundiales S. de R.L de C.V., better known as The Coca-Cola Company, dedicated to the production and sale of beverages worldwide. It is backed by more than 120 years of experience that position it as the #1 beverage manufacturer. Headquartered in Atlanta, Georgia. It is currently a company that offers more than 500 brands in more than 200 countries. In addition to Coca-Cola brands, its portfolio includes some of the world's most valued beverages, such as AdeS seed-based beverages, Ayataka green tea, Dasani waters, Del Valle juices and nectars, Georgia coffee, Gold Peak teas and coffees, Honest Tea, Minute Maid juices, Powerade sports drinks, simply juices, SmartWater, Sprite, VitaminWater, and ZICO coconut water.

It began its operations in plant La Paz, B.C.S in 1994 Bebidas Mundiales, arises like warehouse, with a construction of 6 x 6 mts², giving employment in total to 16 people, receiving the product directly from La Embotelladora de Mazatlán, Sin. In 1995 it begins operations like producing plant, locating the warehouse in an area of 15 x 6 mts² it counted on a capacity of 1700 full boxes in floor, and the container of the daily sales of the routes was accommodated in the patio, because it was not counted on an adequate warehouse. Currently in 2020, it has a construction of 38,527 mts², employing 396 people in La Paz and a total of 742 employees in Franchise.

This problem arises from the need expressed by the head of the training area to have a control of driver's license validity and certification to ensure that drivers on duty have their driver's license up to date. This licence is valid for only 3 years and is granted once the candidate driver complies with the evidence required by the Standard for the certification of drivers, which guarantees that they have the necessary knowledge and skills after being trained by a certifying body to be able to rule out any type of road accident that could jeopardise the safety and integration of the workers themselves, as well as that of the public.

In the years 2014-2015 there was a 22% increase in traffic accidents and fines caused by the lack of follow-up.

In 2017, mandatory certification of drivers began, and there are currently 4 certifiers at the La Paz plant. However, in 2019, according to statistical data, 10 accident events were recorded, resulting in the company paying a deductible of \$124,880 pesos for the risk premium insurance. In 2020, the planning of the present project started.

The aim of this project is to standardise the driver certification process, formally establish internal guidelines and standards, as well as more effective control over the company's driver certification process. This work was carried out in the Human Resources (HR) department. Specifically in the area of training of 177 active drivers involved in the driving of official vehicles, as well as in the driving of light and heavy goods trucks that are responsible for the distribution of goods.

General objective

Standardisation for delivery and administrative drivers under the CESVI standard in Bebidas Mundiales, S. de R.L de C.V.

Specific objectives

1. To carry out a diagnosis of the Human Capital area in the company Bebidas Mundiales S. de R.L. de C.V. in order to know the current situation regarding driver training.
2. Determine the number of drivers who are or are not certified and have a driver's license.
3. Design a procedure manual to control the certification process.

It is necessary to guarantee the safety of driver-employees, which entails the safety of the rest of the population. The aim is to reduce the occupational risks of not being certified in order to maintain a safe fleet.

This will make it possible to control and avoid operational failures through new processes and technology to reduce traffic accidents that put the health of employees, suppliers, customers and the general public at risk, as well as to avoid the loss or theft of the goods being transported.

It is necessary to ensure that all drivers are certified and have the necessary external licence and to ensure that all vehicles leaving the CEDI and/or La Paz plant comply with the documents and scheduled maintenance. Through this project it will be possible to control and standardise the certification procedure, which includes manuals, formats, monitoring in order to control and avoid situations or failures in the procedure such as: no external licenses or expired licenses, not being certified or expired certification, speeding, no documents or maintenance in force.

Development of the model

Deming was the main promoter of the continuous improvement cycle, but in reality this cycle was defined by Shewhart who considers it as "An elementary methodological process applicable to any field of activity, with the aim of ensuring the continuous improvement of these activities" The Deming wheel or cycle is a methodological process that aims to apply to any process a cyclical action formed by four fundamental steps

P = PLAN = Plan thoroughly D = DO = Perform, carry out, do. C = CHECK = Check, verify. A = ACT = Act.



Figure 1 Representation of the PDCA cycle
Source: (Martinez, 1990)

Type of research

The research method used was a qualitative/quantitative (Mixed) analysis. This method was chosen as, according to (research, 2014) refers to the mixed method as a procedure to represent systematic, empirical, critical processes of a research and involve quantitative and qualitative data collection.

1. Planning.

At the beginning of the planning process, the instruments for data collection were selected, a schedule of activities was drawn up that helped to plan the different tasks of the diagnostic process of the company in relation to the planned deadlines, as well as to keep a better control between what was planned and what was achieved.

AREA: Capital Humano		Responsables	Semana							
No.	ACTIVIDAD		Octubre-Noviembre							
			01	02	03	04	05	06	07	
1	Reconocimiento de los choferes certificados	KPRE SSF	█							
2	Establecer los mecanismos de aplicación de instrumentos	KPRE SSF	█	█						
3	a) Planeación. Diseño de los instrumentos.	KPRE SSF			█					
4	b) Aplicación La información que se recolectara será a través de una entrevista al Jefe de C.H y encuesta a los colaboradores.	KPRE SSF			█	█				
5	c) Procesar la información	KPRE SSF					█	█		
6	d) Análisis de la información	KPRE SSF							█	█

Table 1 Timeline of activities for information gathering
Source: Own elaboration, 2020

Field research was carried out to collect data on driver certification using the following instruments.

1. Direct observation (records, historical information and evidence).
2. Direct interview with the Head of Human Capital and certifier (Structured, unstructured and mixed).
3. Survey of delivery drivers.

Design of the instrument

1. For the observation it was necessary to design a check list. See format.

CHECK LIST CERTIFICACIÓN DE CHOFERES		
SE CUENTA CON...	SI	NO
1- Registro de la plantilla laboral de la empresa		
2- Registro de plantilla laboral de choferes		
3- Curso de Certificación a choferes		
4- Registro de choferes certificados		
5- Registro de choferes con licencia vigente		
6- Instalaciones aptas para impartir el curso		
7- Certificadores disponibles para dar cursos		
8- Material de apoyo para los cursos		
9- Material de evaluación para el curso		
10- Total de colaboradores que manejan certificados		
11- Controles aptos para el seguimiento de la certificación		
12- Un responsable de dar seguimiento a las certificaciones		
13- Credencialización vigente de certificación para choferes/repartidores		

Table 2 Check list

Source: Own elaboration, 2020

2. Interview with the Head of Human Capital

Objective: To identify the certification process and active drivers in the company.

Design of the instrument

The structured technique was used, considering 12 items (period, number of participants who start the process and number who conclude it, requirements, training process, evidence of conclusion, follow-up, etc.). See format.

Instituto Tecnológico de La Paz



Interview with the Head of Human Capital

Name: X

1. What is the size of the company's workforce?
2. How many employees drive a delivery truck?
4. How many employees drive an official company vehicle?

5. Of the total number of employees who drive, how many employees are certified?
6. What is the number of employees required to be certified?
7. Who are the people in charge of certification?
8. Are there any standards that govern the monitoring of certifications?
9. What is the certification process for the company's drivers?
10. Are there any employees whose certification process is incomplete?
11. What kind of evidence do you have of certifications?
12. What kind of controls do you use for monitoring?
13. What is the rate of claims that is allowed by the social security?

Thank you very much for your time.

3. Interview with the certifier

Objective: To identify the certification process and active drivers in the company.

Design of the instrument

The structured technique was used, considering 10 items (period, number of participants who start the process and number who finish, requirements, training process, evidence of completion, follow-up, etc.). See format.

Instituto Tecnológico de La Paz



Interview with the certifier

Name: X

1. Which is the certifying body that endorses it?
2. What type of training do you provide to the drivers?
3. What is the ideal profile of the driver?
4. For how long is the certification valid for the drivers?
5. How many drivers have you trained up to now?
6. What are the most important topics covered by the certification?
7. What are the stages of the certification process?
8. What percentage of drivers successfully complete their certification?
9. What kind of certificate is given to the driver who has been certified?
10. Do you have an updated database of certified personnel?

3. Driver survey

Objective: To verify the participation and commitment of drivers to comply with the standards and processes referred to in the certification.

Instrument design

A questionnaire was designed with 12 items, using a Likert scale with 5 options that the driver chose considering his participation in the operation of the company's vehicle unit.

The categories considered were: training, vehicle handling, traffic knowledge, routes, vehicle conditions and improvements. The response options are as follows:

Affirmation
Strongly agree
Agree
Neutral
Disagree
Strongly Disagree

Table 3 Likert scale points

Source: Own elaboration

ENCUESTA PARA LOS CHOFERES DE PLANTA LA PAZ. BEBIDAS MUNDIALES. S.A DE C.V

INSTITUTO TECNOLÓGICO DE LA PAZ

Turno: _____ Fecha: _____ Tipo de transporte: |
Puesto: _____

	Totalmente de acuerdo	De acuerdo	Neutral	En desacuerdo	Totalmente desacuerdo
1. ¿Considera importante contar con su licencia de conducir vigente para ejercer su trabajo?					
2. La certificación es indispensable para poder manejar un camión oficial					
3. Considera necesaria realizar una inspección diaria al exterior para verificar las condiciones del camión.					
4. Considera necesaria verificar diario las condiciones internas del camión.					
5. Utilizo el mismo camión de reparto todos los días.					
6. Es usted consciente que el uso y mantenimiento correcto de transportes evita accidentes.					
7. Cuenta usted con experiencia en la conducción del transporte ligero y pesado.					
8. Conoce y aplica a la perfección las normas y leyes de tránsito.					
9. En caso de un accidente o situación de emergencia, ¿cuenta con los conocimientos para saber actuar de manera pertinente?					
10. La empresa me capacita de manera adecuada para el desarrollo de su labor					
11. Se encuentra motivado para desempeñar de la mejor manera su labor.					
12. ¿La empresa le da un adecuado seguimiento a su certificación?					
13. Sugerencia de mejora.					

Population and sample

A finite population size was considered for the application of the instrument.

The sample considered was the result of the application of the following formula (Morilla):

$$n = \frac{N \sigma^2 z^2}{(N-1)e^2 + \sigma^2 z^2} \tag{1}$$

$$n = \frac{72 (0.5)^2 (1.645)^2}{(72-1)(1)^2 + (0.05)^2 (1.645)^2}$$

$$n = 36$$

Where:

n= The sample size

N=Population size

σ =Population standard deviation .05

Z= Value obtained using confidence values, it is taken in relation to 90% confidence equals 1.645

e=Acceptable limit of sampling error varies between 10% (0.1) As a result of the sample a random probability sampling was used considering 36 drivers.

2.- TO DO

Diagnosis (Knowing the current situation of the company)

Direct observation

Application of the instrument

On September 7, 2020 at 4:00 pm the application of this instrument began at the facilities of Bebidas Mundiales S. de R.L. de C.V., using the check list as a tool to list the aspects that could be found and those observed. The support of Lic. X Head of Human Capital was provided for the questioning of documentary information, records and evidence that allowed the instrument to be applied.

The boss verified the evidence they had in safekeeping, which consisted of some of the company's documents.

Interview with the Head of Human Capital

Application of the interview

The interview took place on September 14, 2020 at 4:00 pm in the office of the Head of Human Capital Lic Z who was kind enough to receive us in order to proceed with the interview. In the first instance we discussed the most important points to know about the certification process, and the details that needed to be refined.

Interview with the certifier

Application of the interview

The interview took place on September 30, 2020 at 4:00 pm in the cubicle of Lic. Z. in charge of driver certification who kindly provided us with all the requested information.

Driver survey

Application of the survey

On November 11 at 7:00 am at the facilities of Bebidas Mundiales S. de R.L. de C.V., the survey was applied to the drivers of routes that started their working day in the morning shift, which was applied to a representative sample of 36 drivers according to the results of the formula. It was applied randomly. The objective of the interview was explained to them, who answered in a friendly manner and in a timely manner.

3. Check

Findings of the check-list

The data obtained are shown.

CHECK LIST CERTIFICACIÓN DE CHOFERES		
SE CUENTA CON...	SI	NO
1- Registro de la plantilla laboral de la empresa	X	
2- Registro de plantilla laboral de choferes	X	
3- Curso de Certificación a choferes	X	
4- Registro de choferes certificados	X	
5- Registro de choferes con licencia vigente	X	
6- Instalaciones aptas para impartir el curso	X	
7- Certificadores disponibles para dar cursos	X	
8- Material de apoyo para los cursos	X	
9- Material de evaluación para el curso	X	
10- Total de colaboradores que manejan certificados		X
11- Controles aptos para el seguimiento de la certificación		X
12- Un responsable de dar seguimiento a las certificaciones		X
13- Credencialización vigente de certificación para choferes/repartidores		X

Table 4 Findings from the checklist
Source: Own design So and Rosas, 2020

- Findings from the interview with the boss

The following data were obtained from the analysis of the information:

BEBIDAS MUNDIALES S.R.L DE C.V					
Total de colaboradores en planta La Paz: 450					
Colaboradores destinados a manejar un vehiculo oficial: 152					
Puesto		Puesto		Puesto	
Repartidores Universales		Repartidores venta Agua		Promotores de venta/ Coordinadores /Jefes de departamento / Areas administrativas / (72)	
Certificados	No certificados	Certificados	No certificados	Certificados	No certificados
24	0	16	0	10	62
Ayudante repartidor universal		Ayudante venta de agua			
Certificados	No certificados	Certificados	No certificados		
8	4	5	3		

Table 5 Findings interview with the boss
Source: Own design So and Rosas, 2020

Findings from the interview with the certifier

Mr. X mentioned during the interview that the certifying body is called CESVI (Centro de Experimentación y Seguridad Vial México). (Centro de Experimentación y Seguridad Vial México) which is a company that works in the prevention of traffic accidents under the required quality standards. Lic. X. is endorsed as a driving certifier for heavy and light equipment, and has been providing training on the standard to the fleet of drivers of the company Arca Continental for 15 years.

The drivers' certification is valid for 3 years, after which time re-certification is compulsory for them to continue working. At the moment, the fleet of certified drivers is covered in the routes of universal delivery drivers and water delivery drivers, a total of 30 active drivers, of which the delivery drivers' assistants are still to be certified, plus all the administrative staff who drive an official vehicle. The certification in both cases lasts 2 days, which are divided into theoretical and practical, and after finishing the syllabus, the knowledge tests are applied, with which the drivers reiterate the knowledge they have acquired.

Findings in the survey of drivers.

1. ¿Considera importante contar con su licencia de conducir vigente para ejercer su trabajo?

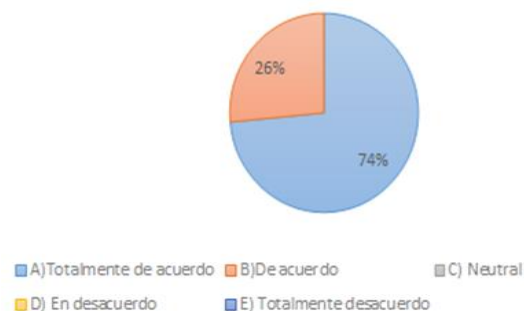


Graphic 1 Do you consider it important to have a valid driving licence to do your job?

Source: Own design So and Rosas, 2020

The result of the graphical representation showed that 95% of the drivers strongly agree with the importance of acquiring a driver's license, 5% agree with the importance of acquiring a driver's license and 5% agree with the importance of acquiring a driver's license.

2. La certificación es indispensable para poder manejar un camión oficial

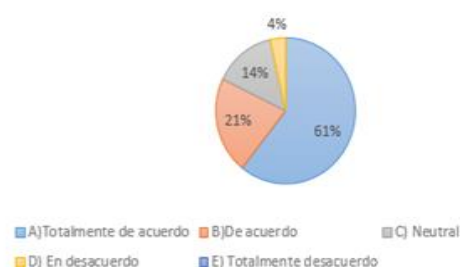


Graphic 2 Certification is a prerequisite for driving an official truck

Source: Own design So and Rosas, 2020

The graphical representation showed that 74% totally agree that certification is indispensable to operate an official vehicle, 26% agree with the certification, this indicated that there is a positive side of the drivers in obtaining the certification and the importance of keeping it.

3. Considera necesaria realizar una inspección diaria al exterior para verificar las condiciones del camión



Graphic 3 Considers it necessary to carry out a daily inspection of the exterior to verify the truck's condition

Source: Own design So and Rosas, 2020

The graphical representation showed that 61% of the drivers in Bebidas Mundiales S. R.L. de C.V. 21% totally agree with the daily inspection of the truck and its conditions, 14% neutral and 4% disagree, this indicates that the highest percentage totally agree with the inspection and only 8% disagree, it was considered that they do not see the inspection necessary, this indicated that a part of the workers would like to avoid the inspection and its conditions.

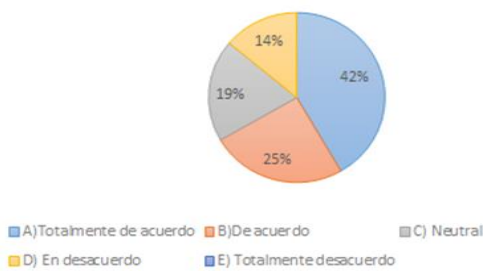
4. Considera necesaria verificar diario las condiciones internas del camión



Graphic 4 Consider it necessary to check the internal conditions of the truck on a daily basis Source: Own design So and Rosas, 2020

The graphic representation in item 4 showed that 54% of the drivers strongly agree with checking the truck's conditions on a daily basis, 31% agree and 15% are neutral. It is considered that the drivers agree to check the conditions inside the truck in order to be able to perform their work properly and to see the internal conditions of the truck.

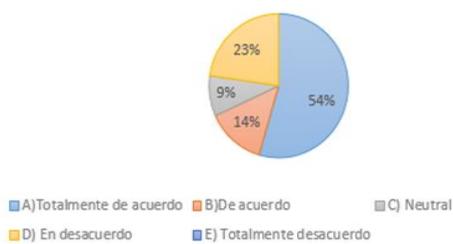
5. Utilizo el mismo camión de reparto todos los días.



Graphic 5 I use the same delivery truck every day Source: Own design So and Rosas, 2020

The graphical representation showed that 42% of the drivers drive the same delivery truck every day with a total of agree, 25% agree, 19% neutral and 14% of the drivers disagree. This indicates that 67% of the drivers drive the same truck every day and 33% do not drive the same truck.

6. Es usted conciente que el uso y mantenimiento correcto de tranportes evita accidentes.



Graphic 6 Are you aware that the correct use and maintenance of transport avoids accidents? Source: Own design So and Rosas, 2020

In the graphical representation it was shown that 54% of the drivers totally agree with being aware that the correct use and maintenance of trucks helps to avoid accidents, 14% agree, 9% are neutral and 23% disagree with the awareness of the correct use of trucks.

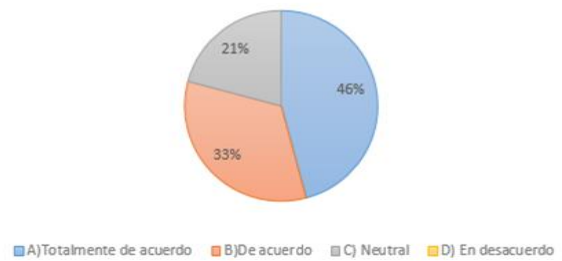
7. Cuenta usted con experiencia en la conducción del transporte ligero y pesado.



Graphic 7 Do you have experience in driving light and heavy transport Source: Own design So and Rosas, 2020

The graphical representation of item 7 showed that 89% of the employees totally agree that they have experience in driving light and heavy transport, 11% agree, which indicates that all drivers know and master the use of a light and heavy truck vehicle.

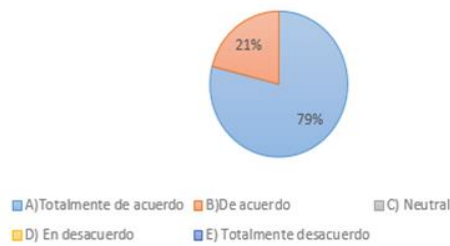
8. Conoce y aplica a la perfección las normas y leyes de transito.



Graphic 8 Knows and applies traffic rules and laws perfectly Source: Own design So and Rosas, 2020

The graphical representation showed that 46% totally agree that they know and apply traffic rules, 33% agree and 21% are neutral, this indicated that they are not aware of the importance of respecting traffic and road rules.

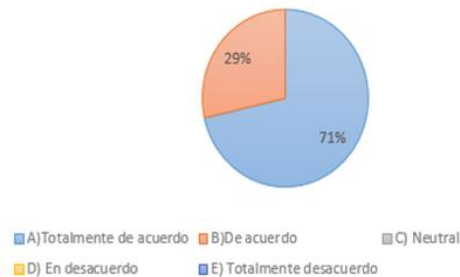
9. En caso de un accidente o situación de emergencia, ¿cuenta con los conocimientos para saber de manera pertinente?



Graphic 9 In case of an accident or emergency situation, do you have the knowledge to know in a relevant way?
Source: Own design So and Rosas, 2020

The graphic showed that in item 9, 79% of the drivers agreed that they have the knowledge in case of an accident or emergency situation and 21% agreed. This indicated that the drivers know the process to follow in the event of a traffic accident.

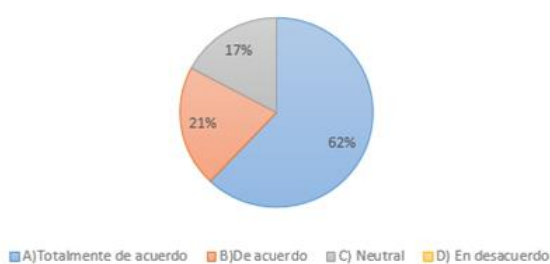
10. La empresa lo capacita de manera adecuada para el desarrollo de sus labores.



Graphic 10 The company provides adequate training for the development of their work
Source: Own design So and Rosas, 2020

In the graphic representation in item 11 on the degree of agreement on the training given to the drivers, 71% totally agree, 29% agree. The training should be reinforced and/or strategies should be sought to reinforce the training provided to drivers.

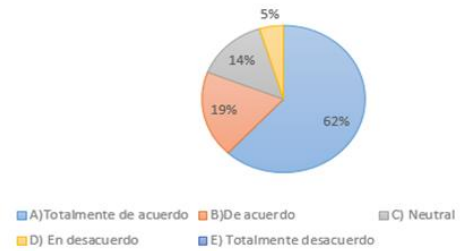
11. Se encuentra motivado para desempeñar de la mejor manera su labor.



Graphic 11 They are motivated to perform their work in the best way possible
Source: Own design So and Rosas, 2020

The representation of item 11 shows that 55% of the drivers are motivated to do their job, 31% agree and 14% are neutral about being motivated.

12. La empresa le da un adecuado seguimiento a su certificación



Graphic 12 The company gives adequate follow-up to their certification
Source: Own design So and Rosas, 2020

The graphical representation of item 12 showed that 62% of the drivers strongly agree that Bebidas Mundiales S. de R.L. de C.V. gives adequate follow-up to the certification, 19% agree, 14% neutral and 5% disagree.

Dissertation of the results

Considering the results of the survey it was found that the drivers are fully aware of the importance of certification and do not show resistance to change with the new process, the incentives for motivation are covered by the company, What is found to be wrong with the findings is the lack of a check list and/or logbook for efficient control of the trucks, both internally and externally, in order to know the mechanical conditions of the vehicle fleet before leaving to cover the route, as well as a lack of awareness of accidents and their causes, and to refresh the knowledge of traffic and road rules that can be part of the training.

Analysis of the information

FORTALEZAS	OPORTUNIDADES
<ul style="list-style-type: none"> La mayor parte de la plantilla laboral de choferes se encuentra certificada hasta el momento La choferes reconocen la importancia de tener licencia y certificación vigente Los choferes cuentan con conocimientos bases para manejar adecuadamente las unidades de transporte La empresa capacita con los temas adecuados a sus choferes Se trabaja una cultura de "FLOTA SEGURA" que promueve el manejo preventivo y seguridad de los colaboradores La empresa ejerce una política de flota con lineamientos que debe de aplicar los choferes repartidores 	<ul style="list-style-type: none"> Capacitar y certificar a personal administrativo, promotores y Jefes de departamentos con el fin de tener cubierto el total de los colaboradores que conducen un vehículo oficial Incentivar a los colaboradores a seguir desempeñando correctamente sus labores a través de recompensas Renovar el material de apoyo y evaluación de la capacitación con actualizaciones cada determinado periodo Detallar el proceso establecido para capacitar a nuevos choferes colaboradores Mejorar el sistema de control para mantener la certificación de los choferes
DEBILIDADES	AMENAZAS
<ul style="list-style-type: none"> Los conductores no cuentan con una credencial que avale su certificación e indique su fecha de vencimiento Existen casos de choferes que no han concluido el proceso de certificación No existe una persona responsable para llevar el seguimiento de las certificaciones con respecto a las fechas de vencimiento 	<ul style="list-style-type: none"> De continuar con la plantilla laboral no certificada en su totalidad se incrementa la tasa de riesgos y accidentes de trabajo Pérdida, destrucción o robo de mercancía debido a accidentes viales Ser acreedor de multas y sanciones por no tener licencia vigente Deterioro de la flota vehicular por falta de mantenimiento preventivo por parte de los choferes

Table 6 SWOT
Source: Own design, 2020

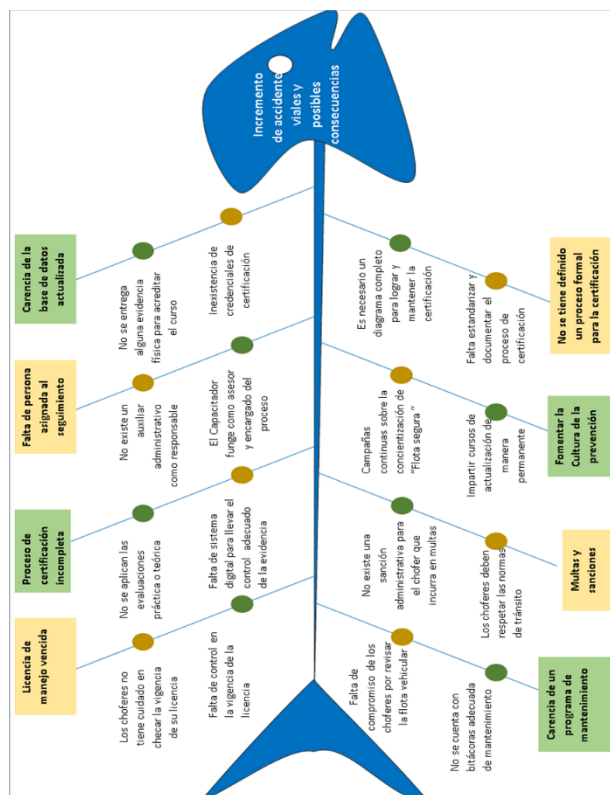


Figure 2 Cause and Effect Diagram
Source: Own design (So and Rosas, 2020)

Results

Tools are presented which, if implemented, will help to solve the problem of the certification process of Bebidas Mundiales S. de R.L. de C.V. drivers.

The tools are:

1. Manual of the certification procedure for drivers.

Manual del procedimiento de certificación de choferes Bebidas Mundiales S. de R.L. de C.V.



Versión 1.0
La Paz B.C.S, a 16 de diciembre del 2020

2. Credentialing of La Paz and Agua planta

La Paz route drivers as an improvement tool to prevent the use of official vehicles without driver certification and to ensure continuity of driver's licence validity and certification.



Figure 3 Driver credentialing
Source: Own design So and Rosas, 2020

3. Software to control and monitor the certification process

A software was designed in the Microsoft Office system in the Excel programme where all the drivers who are certified and/or recertified were registered and filtered. It contains the driver's full name, control number, position, site, work area, personnel area, licence data, licence validity, type of vehicle he/she can drive, days remaining before expiry,

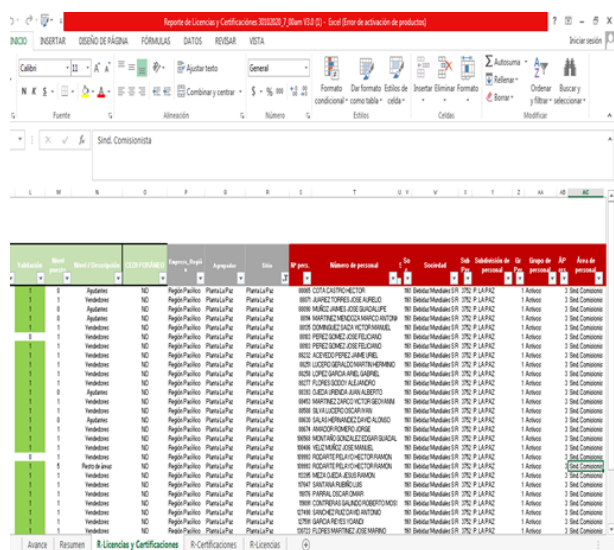


Figure 4 Software to control and monitor the certification process
Source: Own design So and Feliz, 2020

4. Programme campaign where importance is given to strengthen the safe fleet programme

SAFE FLEET MANAGEMENT AWARENESS CAMPAIGN

Objective: To raise awareness among employees of the responsible handling of official vehicles

Target group: Drivers, promoters and driver's assistants
Tools: Posters, Computer equipment, Notebook and pen
Campaign operation: <ol style="list-style-type: none"> 1. Posters will be placed at strategic points where employees can become aware of the information 2. A complaints and/or suggestions box will be set up for employees who have new opinions. 3. A weekly meeting will be held with the head of human capital, safety supervisor and heads of area to verify that the certifications are still in force to protect the safety of their workers.
Timeframe to be implemented: the campaign will be permanent from the beginning, as it is intended that social service students will support the follow-up of the campaign.





Figure 4 Safe fleet management awareness campaign
Source: Coca Cola, 2021

Conclusions

These tools are designed based on information obtained from the company's diagnosis.

As a result of this work, the design of tools such as formats, diagrams, procedure manuals, among others necessary to achieve the certification and validity of drivers was achieved with the aim that in the event that it is implemented in the company, the following benefits will be achieved:

For the company.

1. Ratify the commitment of the company's senior management to the certification process for its drivers.
2. Strengthen the corporate image of the company.

Workers.

3. The aim is that the drivers know and apply their responsibilities in a formal way in order to achieve an efficient performance in their work.
4. To reduce the risks in accidents and during the operation of the units.
5. Genuine interest in remaining current in certification.

General.

6. Encourage and stimulate respect for traffic and road rules.

Recommendations

Design a monitoring and surveillance programme for the certification process.

Design and implement a preventive and corrective maintenance logbook for transport units.

The provisions of the manual are observed and applied unrestrictedly.

To integrate file by driver with the necessary evidences referring to its certification.

References

- Investigacion, M. d. (2014). *Hernandez Sampieri*. Mexico: Trillas.
- Martinez, G. M. (1990). *Fundamentos de Administracion*. Mexico: Trillas.
- Morilla, A. (s.f.). Muestreo en poblaciones finitas. En B. Diaz, *apuntes* (pág. 30).