

Lean Staff Management in the Light of the Covid-19: Exploratory Factors' Analysis – Case Studies for Service Companies

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Abstract

The main purpose of the paper is to identify and analyse a state of exploratory motivating factors in terms of lean management as the instrument of a policy of human resource management in the face of COVID-19 pandemic implemented in service companies. The main question is: if the motivation system used in the companies works out up against the unpredictable situation such as COVID-19 pandemic? The secondary purpose of the paper is to recognise relations and dependencies between these factors, and the question is: what factors have the strongest or the weakest relations with Lean Staff Management (LSM) tools?

This research designed based on interview was conducted due to the lack of existing studies on the current status of motivating factors in terms of lean management tools in two service companies (case studies) in the light of COVID-19. The results show that factors influencing work efficiency in a dominating manner were, primarily, financial incentives (almost 21%), communications (around 21%), and workplace atmosphere (almost 18%). The paper investigates also the benefits and concerns of implementing LSM in service companies during the pandemic. This research might help the service organization's management to identify the employees' problems to implement more effective lean services.

Keywords

Motivation, Lean staff management, Lean practice, Hospitality sector, COVID-19, Service company.

Introduction

The COVID-19 has impacted negatively many sectors like hospitality, transportation, tourism, etc. but also fostered to provide an opportunity for new patterns in staff management, especially the hospitality sector. With little time to prepare, employees had to adopt their offices to work from home transforming a corporate culture into “home culture” (Couch et al., 2021). Many sectors are transforming work and changing companies' behaviour due to the COVID-19 disruption. Unfortunately, the hospitality industry has no opportunity to work online because of obvious reasons but still it has led to reevaluation of global value creation, and management strategies in case

of human's motivation, fundamentally transforming the way how service companies operate (Dyduch et al., 2021; Hitka et al., 2021). This transformative approach to work changed a way of staff management, shifting to, e.g. digitalization (Kudyba, 2020; Nagel, 2020). Some companies try to help come back their employees strengthen, restoring their post-crisis motivation in the work by adopting lean staff management (Camilleri, 2021). This intervention will boost their morale and provide them with sense of belonging in order to enhance their productivity levels, reduce specific unhealthy behaviour, and improve communication. Environment workplace has changed, but what keeps employees motivated and what employers and leaders can do remains the same. On the other hand, Industry 4.0 revolution influenced the practices and motivation models changing a working style, and requiring a skilled workforce (Maisiri et al., 2019; Liboni et al., 2019).

Due to the faced rapid changes in human resources management and operational activities in many companies last time, lean staff management seems to be reasonable approach aimed at considering moti-

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vational factors affected the productivity of staff in the COVID-19 pandemic by using various resources in an efficient way. The realization of “lean” can be measured through versatile, daily-management tools (5S, Kaizen, Six Sigma) to monitor and change behaviour, something that Human Resources can monitor. Lean approach has emerged in the past decades as one of the most popular themes in the business and service literature as it is not only the most extended production paradigm, but management approach contributing substantially to enhancement of operational performance (Dieste et al., 2020)¹. With its objective, companies can improve quality, safety, and morale (Liker & Morgan, 2006). Moreover, many sectors like hospitality or production are transforming their operations and changing employees’ behaviour due to the COVID-19 disruption. As the effect of the pandemic, a significant impact was on motivation that constitutes the driving force of a company’s personnel management. The incorporation of lean concept engages employees at all levels of a company and provide right communication to deliver/ensure a smooth process flow eliminating those that do not offer value (minimalization of waste and internal variability, increase in productivity). The growing trend in the implementation of transformations according to the lean approach among service companies have been observed (Bruun & Mefford, 2004; Yap et al., 2018; Bevilacqua et al., 2019).

To survive and thrive in a pandemic crisis, it is necessary to quit traditional ways of management based on motivation theories and challenge it through the examination of personnel management factors to reflect changes in working culture considering what new trends might mean for how business values are created and delivered. Opportunities exist in the transformation of approaches to work to examine motivation factors which enable companies to reconfigure their business models to work under uncertainties.

Most enterprises aim at developing competitive advantages on the market which is also conditional upon appropriate human capital (Hamadamin & Atan, 2019). The work performed is highly influenced by motivating, which is one of the most important factors of work efficiency enhancement. A relation between motivating factors and lean manufacturing has been investigated well (Bonavia & Marin-Garcia, 2011; Produção et al., 2019) but not discussed for service companies. Only one study has been found in tourism sector (Hitka et al., 2021). Therefore, the literature

is limited regarding empirical studies that motivating factors influence lean human resources. This is the intention of this study. This paper fills the research gap by exploring most motivating factors affecting lean staff management in the service companies. These factors have been derived from the intersection of motivation models, as presented in Fig. 1.

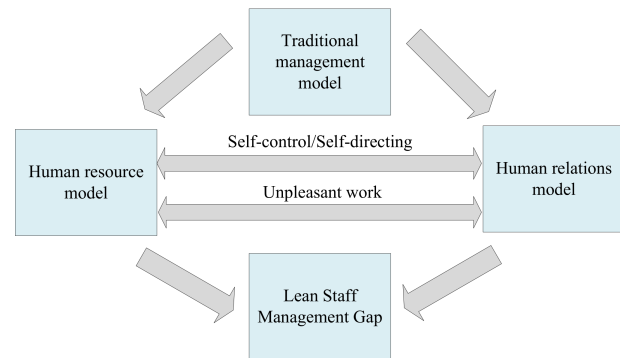


Fig. 1. Research gap in the current literature

The goal of the paper is to present the current status of employees’ motivation through motivating factors as elements of the lean staff management (LSM) based on the example of hospitality sector in the COVID-19 pandemic. The hospitality sector has been chosen due to a specific character of the work performed by employees (direct contact with a customer, the requirement for flexibility, being approachable, patient, emphatic, etc.). The main two questions are: 1) which factors are of the essence for the lean motivating process? And 2) what is the effect of the motivating factors on staff management in the COVID-19 pandemic? Because the application of lean management is placed on human factors (Cardona Mora & Bribiescas, 2015), the authors of the paper have investigated the motivating factors in the light of staffing management in the era of COVID-19.

To meet the goal, the authors through the survey and interview of several groups of employees, have tried to:

- identify the explanatory factors that influence the staff management in terms of employee’s motivation, their efficiency associated with the implementation of lean concept in the hospitality sector (research method and Figure 3);
- analyse dependencies between factors and their results in terms of the staff management (Table 3);
- analyse pros & cons of lean staff management tools in the two analyzed case studies (Table 5);
- understand an importance of these motivating factors in value generation for employee assets, and (Table 8).

¹Evaluation of lean could be found in (Benkarim & Imbeau, 2021)

By involvement of motivating factors in the human resource management procedures require continuous improvement. Therefore, it appears lean tools as a concept to be challenged in staff management based on motivating employees is worth analysis and discussion. Desk research consisting of the existing subject literature on models and theories of employee motivating, scientific articles, the Internet sources were examined to present employee motivation factors supported by statistical analysis research methods, techniques and tools applied in the employee motivating process.

A significant review of the existing literature on the subject area has been done to explore a factor analysis with the help of inferential statistics in a view of the critical success factors.

Theoretical background

Motivating theories

Selected models and theories of employee motivating arising from the specifics of the hospitality sector are worth describing and emphasizing, especially in the face of uncertain times and unpredictable events that affect its activity.

Motivating theories have a timeless meaning, which are reflected in the current literature (Constantoglou & Aivalioti, 2021; Kim et al., 2021; Park & Shenyang, 2021; Bounou et al., 2021; Kaspar & Nordmeyer, 2022) on the subject. Following the subject literature review on these issues (Kusluvan, 2003; Bounou et al., 2021; Lai & Cai, 2022) the aspect of motivating employees is frequently undertaken as regards company management in terms of information (Abir et al., 2022), staff competences (Liboni et al., 2019; Sima et al., 2020), consumer behaviour (Sima et al., 2020; Toubes et al., 2021). Motivating is treated as a whole process that should be effective, covering comprehensive activities which meet the employee expectations. Highly motivated people with their clearly defined goals, undertake actions allowing them to achieve such goals (Armstrong & Armstrong, 2009; Chi et al., 2021). Therefore, with the three components of motivating (set goal, effort, perseverance to fulfill the goal) (Arnold et al., 2010; Wang et al., 2022) employees' participation increases significantly in the decision-making process, contributing to increase of their creativity.

The character of motivating to work often varies, it becomes a result of the process started as noticing an insufficiency, deficit between the actual and the expected state. It is divided into internal and exter-

nal one. The internal state, appearing automatically refers to stimuli (responsibility, freedom to make decisions, development opportunities, acceptance among employees, promotion potential) thanks to them people behave in a particular manner and take responsibilities for their work achieving set goals. The external state concerns encouraging activities which are rewarded, or which enable preventing a penalty.

The subject literature also presents another division of motivating: negative and positive (Lauby, 2005). The negative motivating is based on fears, apprehension, anxiety and a sense of a hazard, whereas positive motivating is focused on the employer exploiting an elaborate reward and praise system. Both types of motivating, used in a rational manner, are complementary, while the subject literature shows that it is advisable to maintain proper proportions, with a predominance of positive motivating.

With the emergence of successive innovative solutions, it became clear that the customary approach to motivating is insufficient. The team concluded that monotony, malaise, task repetitiveness reduces considerably any motivation to act or may even demotivate. The described concept defines an employee within a social aspect. An organisation is not solely a work place with dominating stiff business relations and lethargic task performance, but also a place where an employee establishes informal, social relations, which have a considerable impact on motivating (Ahmed et al., 2021; Amrutha & Geetha, 2020; Babalola & Nwanzu, 2021).

The Taylor's traditional model of motivating originates in an object approach to an employee and treating them as a work "tool" and where motivating was not so important. It was essential that employees (in particular labourers) fulfil tedious and regular tasks efficiently effectively and fast. The traditional model was based on a belief that people are lazy and indolent by nature, while work itself is a chore to perform. Table 1 presents the employee motivating models described above and indicates fundamental model assumptions, rules of conduct for the management and employee expectations, while Figure 2 outlines interlinkages between components of motivating models.

Another theory, ERG (E-Existence needs (existence), R-Relatedness needs (social relations) and G-Growth needs (development, personal growth)), distinguishes the equivalence to the Maslow's needs of existence and relatedness to individuals' development in the field of personality. Although the subject literature describes broadly Maslow's (1987) hierarchy of needs and Thompson's theory based on the needs and their hierarchy (Thompson & Wildavsky, 1986), they are in contrast in two aspects (Armstrong &

Table 1
 Comparison of employee motivating models

Motivating models		
Traditional model	Human relations model	Human resources model
Assumptions		
majority of the society finds work unpleasant (Bruce, 2020)	people have a need to feel they are important	work is unpleasant, employees have a need to contribute to implementation of important objectives established jointly
it is more important how much employees earn than what they do	people desire belonging and recognition	current work does not require people to be as creative and self-driven as they are capable of
significantly fewer people have skills involving doing work requiring being self-driven and self-control	those needs are more valuable than money in motivating to work	
Rules of conduct for the management		
strict employee supervision and control (Chibili et al., 2019)	every employee must feel important and necessary	creating jobs giving every employee an opportunity to use their potential
planning tasks into easy, routine activities	notifying employees about management's plans but without forgetting to listen to employees' ideas and objections	encouraging subordinates to participate in significant aspects, at the same time expanding the scope of subordinates' self-creation and self-control
establishing simple and transparent work instructions and procedures as well as firm obligation to observe them	introducing a certain scope of opportunities for employees' self-directing and self-control	
Employees' expectations		
employees are able to tolerate work on the condition of decent pay and fair management (Yarbrough, 2016)	sharing information with subordinates and involving them in making routine decisions, which will enable satisfaction of their fundamental needs of belonging and self-esteem	expansion of employees' self-directing and self-control will result in an increased operational performance
if employees' tasks are not difficult and they are under a detailed scrutiny their performance will comply with the standards (Davidescu et al., 2020)	satisfaction of the said needs will result in the subordinates being more willing to cooperate	there is a potential for a side effect among subordinates, which will result in their satisfaction with work

Armstrong, 2009). According to the ERG theory, an individual may be motivated with above mentioned factors simultaneously, whereas, according to Maslow they conduct their operations individually in a hi-

erarchically ordered manner. Beside discrepancies in both theories, all of them explain what forms and possibilities the supervisors must affect their subordinates.

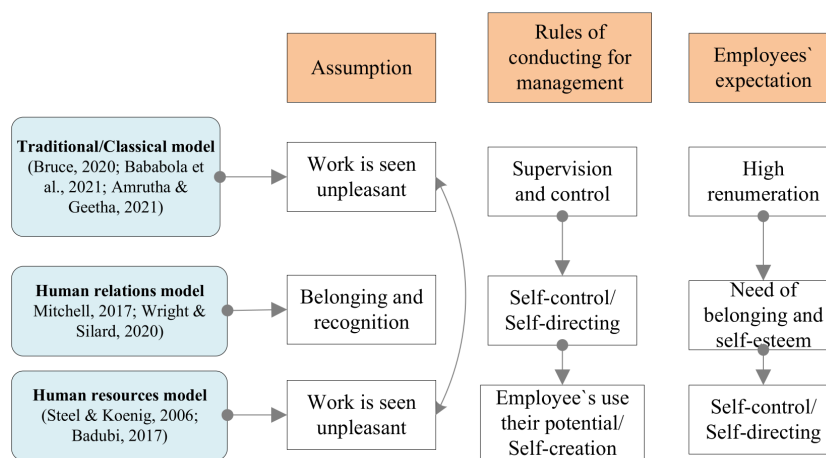


Fig. 2. Framework research

Relationships between lean management and human resources area

Lean management is considered as a flexible philosophy to be adopted by any kind of business. Lean management means identifying business processes, eliminating those that do not offer value, and minimising waste. Although it is associated with the manufacturing it also requires encompassing all areas of the business involving employees. Therefore, human resources are necessary to be involved in the employment of right staff and its motivation in business processes. Through the use of lean tools (Kanban, Kaizen, 5S) employees are engaged strongly in continuous improvement of processes when they feel the job security (Marinova et al., 2015) and achieve workers' efficiency (Produção et al., 2019; Stadnicka & Sakano, 2017) by granting the autonomy to produce open innovative sphere (Burcharth et al., 2017) or the greatest increases in their performance (Gaiardelli et al., 2018; van Assen, 2018). These mentioned interrelations between lean management, human resource management (HRM) and outcomes for employees were also outlined distinctly in (Bamber et al., 2014).

The growing importance of the lean management results from friendly workplace environment via cross-functional teams and its effect on human behaviour. It defines the need to identify a relationship between customers and employees that allows making opportunities to motivate the hotel's staff by variable customer requirements, achieving competitive advantage (performance improvement).

Lean conceptualisation varies considerably among studies in terms of human resource practices considered. And the study (Gaiardelli et al., 2018) explored the effects of lean practice implementation on human-related factors, indicating a positive relationship between the basic Maslow's needs and individual growth, thus leading to increase in the employee performance (Zameer et al., 2014). The similar research in regard to motivation in the working environment and operational results was done by Hasle et al., (2012). Moreover, as reviewed by Hasle et al., (2012), negative impact of lean on the working environment and employee's well-being was outlined for manual work with low complexity. A moderate effect of management on lean and performance improvement was evidenced in (van Assen, 2018) resulting from a higher level of work efficiency.

Therefore, depending on the area of application, the use of appropriate lean tools may be incorporated by service companies to practise them in staff management. According to the authors of the paper the fol-

lowing factors are worth to be analysed in order to identify their significance and influence on staff motivating: remuneration and bonuses, learning and trainings, equal treatment, sense of self-realization, positive teamwork environment and well-being at workplace, flexibility and adaptations' opportunities to new conditions as well as communication and relations at work (Table 4).

The second difference is manifested through the fact, that according to Maslow, an individual will remain on a particular hierarchy level until a particular type of a need is satisfied. On the other hand, the ERG theory introduces a frustration and regression component. If any problems emerge on the route to satisfy a need, the person will step back to a lower level and start looking for new opportunities to fulfil it at that level.

Yet another concept addressing the aspect of motivating and referring to Maslow's concept of needs is the Herzberg's two-factor theory (Herzberg et al., 2010). The research covered the factors motivating the respondents to be more committed to perform orders as well as those which impeded meeting a particular objective. The reasons causing fulfilment at work vary from those causing dissatisfaction. This claim is particularly important for the tasks undertaken within an employee's motivating increase.

In the course of time many new hypotheses and scientific assumptions of value to the human resources management practice have been created. Modern management systems analyse real cases because an organisation willing to succeed must be quick at diagnosing and removing a problem they have observed. It is also worth mentioning that best-worst models are used while motivating employees in service companies, i.e., in hospitality sector, known as probabilistic modelling (Marley & Louviere, 2005; Lee et al., 2008).

All the characterised models and theories on human potential management in business and, mainly, motivating employees to work more effectively and efficiently should be of a particular use at the hospitality sector due to its specific nature. This especially refers to the manner of work organisation of hotel managers and its complex nature, the seasonality in the hotel industry, the nature of a demand for hotel services or defined employee features (specifically those in direct contact with guests). The hospitality sector employees must combine a plethora of functions and adjust to the changing customer needs. Services customisation, the so-called tailoring, which means a personalised approach to every guest is of great importance in the hotel industry. Seasonal demand for accommodation and catering services requires an introduction of a wide spectrum of solutions and offers to extend

the season and to increase the demand as well as additional services such as wellness, fitness, hairdressing, etc. Personality features of individual employees are of definite significance in the hotel and catering sectors because their constant direct contact with customers (in a restaurant, pub, hotel, reception) affects how the entire service is perceived. Therefore, motivating hotel sector employees plays a very important role because it regards the most important link in the accommodation and catering services provision – the human factor.

By examining the literature, the researchers can better understand the motivating factors of the employees impacting staff management in the COVID-19 situation. Therefore, the study might contribute toward the literature by using these factors for lean managing of staffers. It also shows the recent study on the Polish hospitality sector – still facing repercussions by the coronavirus, since it is a sector that has received little attention from researchers.

Lean management tools as the instruments of personnel's motivating in the face of the COVID-19 pandemic implemented in service companies (especially in the hospitality industry) seem to be differentiated and variously used in many contexts by the companies being research subjects in the paper (Table 4). The motivation system used in the companies works out up against the unpredictable situation such as the COVID-19 pandemic, but it is also implemented in ordinary situations demanding the use of motivational system as an entire process. The new conditions implied by the pandemic led service companies to reinvent themselves, so that they could keep providing lean value to their staff by management. Related studies confirm first attempts to apply lean instruments in the pandemic outbreak conditions, but for talent management only (Aguinis & Burgi-Tian, 2021). Prior studies identified a series of human resources factors that facilitate lean practices (Martínez-Jurado et al., 2014) and there is supposed to be a broad consensus that staff management and change are crucial dependencies for the success of the realization of lean instruments or initiatives. This research might confirm that exploratory factors are being adapted in services more rapidly to the current event scenario /unprecedented situations. Therefore, lean staff management opens a room to: (1) identify fullest potential to contribute to efficiencies of personnel that have been survived in the pandemic; (2) discovering better ways of working; (3) giving service companies the opportunity to face its toughest competitive pressures – to compete through lean management tools – by building motivational, competitive, and adaptive staff focused on findings (factors with dependencies) from the re-

search. Similarities and differences between factors in the area of human resource management have been outlined in Table 2.

Table 2
Impact of pandemic COVID-19 on the level of employee motivation in various industries

Authors	Description	
Aguinis & Burgi-Tian, 2021	Similarities (+)	+ Employee performance
	Differences (-)	- Management of talent - Lean tools
Tortorella et al., 2020	Similarities (+)	+ Flexibility + Communication + Employment relations
	Differences (-)	- Degree of labour intensity - Degree of interaction and Customization - Lean service - Quality improvement
Martínez-Jurado et al., 2014	Similarities (+)	+ Common staff management factors in hospitality industry: teamwork environment, job rotation, training
	Differences (-)	- Staff management factors in the aeronautics industry: contingent rewards, job security, versatility and participation
Hitka et al., 2021	Similarities (+)	+ Remuneration + Bonuses + Communication at work + Good working team
	Differences (-)	- Job security - Superior's approach

An adoption of lean in personnel management is an emerging concept in the hospitality industry, especially in the COVID-19 time. It means that the case study is a suitable research approach as preferred to present a contemporary phenomenon in some real-life context when researchers have no or little control over the event (Yin, 2009) or in management field (Ebneyamini & Sadeghi Moghadam, 2018). In details, an exploratory study is designated for the analysis of factors having impact on the staff management and used in conjunction with survey research to develop dependencies between factors and their results, thus consequently, to develop findings/explanation for lean staff management in the light of the pandemic in the hospitality sector. Therefore, this approach will allow understanding an effect of motivating factors in workforce management.

The literature on COVID-related motivational system declines also to consider lean staff management. Assuming motivational challenges, staff management may provide unique directions for service companies to understand why and how factors have an impact on staff performance. The present study, therefore, was

to explore motivational factors to show “trajectories” of motives and motivation of workforce on the company performance relative to the pandemic. This was a little basic challenge for searching factors regarding the behavioural motives of staff to facilitate lean tools in service companies.

The article addresses valid and significant motivational factors for efficient personnel management in the COVID time in the hospitality sector. The research will allow a better understanding of behaviours, mistakes, executive processes, employee motivating systems applied in the hotel sector.

Research approach and method

At the early stage of research procedure, the authors have considered ten hotels, two of them were analysed in depth (as representative samples). The subject of research was designed and conducted based on the interview with hotels ‘employees. for the two case studies: two luxurious hotels located in the Podkarpackie Province (Poland). To justify the choice, the authors have considered data-driven cases due to the attempts of implementation of lean management. The research tool was built with the use of structured interview focused on standardization. Each respondent has received the same questions (behavioral open-ended and closed questions), In the same order. A total of 30 respondents for two selected services companies (15 respondents per each hotel) were asked in the period between March and May 2020. The participants chosen in this research had minimum 5 years of experience involving middle management, specialists, physical and office workers.

The research sample was selected on the base of cherry-picked inclusion criteria as follows:

- the cases provide understanding of a staff lean management,
- the cases provide sufficient information to characterize their staff management linked to the lean concept,
- the cases provide distinct ways of staff management in comparison to other “luxurious” hotels.

The selection was also based on tourists’, employees and guests’ opinions which enabled the authors of the research to perceive the two companies as representative samples. The analysis has covered the principles for motivating the employees of the considered hotels. This selection was validated on the grounds of the guests’ opinions on the popular website, presenting opinions about facilities for tourists – Tripadvisor.com (pl.tripadvisor.com). The criterion governing

the hotel search was “luxurious”. Under this criterion the analysed hotels have been scored very high.

Data was collected through the diagnostic method (with the use of the interview among the hotel’s employees). Therefore, the authors of the paper have interviewed 30 persons from management staff from two hotels that maintained their activities during the pandemic due to the principles and techniques of motivating employees.

The empirical part of this study has involved an attempt to identify factors and techniques of employee motivation in the COVID-19 time and demonstrate the connection between the theory and business practice regarding employee motivating in the hospitality sector. Stimuli and circumstances determining their efficiency as well as the employee assessment of their operating motivation system have also been indicated. The selection of motivational factors comes from the fact that these factors are the most cited ones in the literature of the subject as presented also in Table 4. Moreover, the factors have been pointed out by the respondents while asked about the most important ones. Thanks to the interview conducted, the authors could provide a juxtaposition of a level of realization of LSM tools motivating employees as presented in Table 5. Statistical analysis of the collected data has been conducted with the STATISTICA 13.1 software package. The data have been analysed with the application of the Pearson’s chi-squared test. It has been used to evaluate whether the dependencies observed in the sample were the effect of a general regularity present in the entire population or a random result. The dependency strength between the variables in the contingency table was assessed with the V Cramer’s test. All measurements of the strength of the relations have been normalised in a way that allows for adoption the values within the range (0-1). Therefore, respectively from 0–0.29 – weak dependency, 0.30–0.49 – moderate dependency, 0.5–1 – strong dependency (see Table 3) (Abbott, 2016; Davidescu et al., 2020). Statistical significance level has been established at the $p < 0.05$ level.

Table 3
Relations measurement between motivational factors

Ranges	Dependencies/Relations
0–0.29	weak dependency
0.30–0.49	moderate dependency
0.5–1	strong dependency

All the respondents have been asked to indicate factors they find most motivating to work, including

those of a non-financial nature. Factors motivating that have been used in the survey have been outlined in Table 3 as one of the research goals.

Data analysis and results

Motivational factors referring to LSM introduced in both case studies (hotel #1 and hotel #2) are described in Table 4.

In the interview, the respondents have been asked to indicate their level of the status of the realization of lean tools techniques.

There is no statistically significant relation between work experience and the frequency of being satisfied with received remuneration ($p = 0.429$). Nevertheless, it has been noticed that employees with a shorter work

experience have been slightly more satisfied with the remuneration than those with longer work experience (see Table 6).

Data presented in Table 6 concern satisfaction with salaries referring to job seniority and employees' experience of all two case studies analyzed in the paper. The research show that the longer the respondents work the lower satisfaction with the remuneration they have. The obtained results occurred statistically significant ($p = 0.429$). Nevertheless, different motivational systems influence the evaluation of motivators, and it is not possible to standardize them to single results without the criteria of sample selection in the study.

The respondents' opinions about the adequacy of their current remuneration towards their skills and competences have been statistically differenti-

Table 4
Motivational factors affecting lean staff management (LSM)

Factors / Variables	Description	Case study #1 represented by hotel #1		Case study #2 represented by hotel #2	
		Dependency	LSM instrument realization	Dependency	LSM instrument realization
Remuneration + Bonuses	The basic salary or pay of an employee, but in the broader sense, remuneration comprises salary, fringe benefits, compensation, bonus, commissions, employee stock option, etc.	Strong	Total Quality Management (TQM) (Dang et al., 2021)	Strong	Kaizen (Abdulmouti, 2018; Štefko, 2019; Srebalová et al., 2020)
Learning & Trainings	"Training is a learning process that involves the acquisition of knowledge, sharpening of skills, concepts" (Khan, 2012). The increase in competitiveness contributes to enhancement of overall employee performance.	Moderate	Empowerment	Moderate	PDCA (Maimuna & Fard, 2013; Taylor et al., 2014; Mura et al., 2019)
Equal treatment (Ineson et al., 2013; Vassou et al., 2017)	In the context of the workplace, all employees – have the right to receive the same treatment and not to be discriminated against on the basis of criteria such as remuneration, age, disability, nationality, race etc.	Strong	TQM (Douglas & Judge, 2001)	Weak	TQM (Abbas, 2020)
Sense of self-realization (Asatiani et al., 2021)	A sense of personal autonomy or self-determination in pursuing individual human growth (opportunities for promotion/possibilities of advancement), conceived as non-domination freedom. Self-realization through work is very closely linked to the learning (Breen, 2019).	Moderate	Kaizen, Six-Sigma	Moderate	Kaizen, Ishikawa diagram (Bilska et al., 2020)
Positive teamwork environment /well-being at work (Hamouche, 2021)	– Promotion of employee safety, growth and goal attainment, encouragement employees to perform to their highest ability. In a positive team environment reduces stress in employee, – Improving overall quality of work; – Capitalization of on a crossfunctional team's strengths and "fill in the gaps" where the team needs it the most	Weak	Teamwork	Moderate	Work atmosphere

Table 4 [cont.]

Factors / Variables	Description	Case study #1 represented by hotel #1		Case study #2 represented by hotel #2	
		Dependency	LSM instrument realization	Dependency	LSM instrument realization
Flexibility (Prasad et al., 2019; Lund et al., 2021; Kaufman et al., 2021)	<ul style="list-style-type: none"> – Adaptation to new reality after the Covid-19 time building a new culture of work. Some factors are considered like personal perception (powerlessness), social transformation and individual lifestyle (Corpuz, 2021; Hamouche, 2021; Liu et al., 2020), – Exploring opportunities for workplace flexibility for employees to provide business continuity and deliver better outcomes (engagement and productivity) 	Strong	Teamwork, Kaizen	Weak	Standardization of work; Ishikawa (Bilska et al., 2020)
Communication (Olkkonen et al., 2000)	Open and honest communication between all of staffers of an organization. This includes communication between employees and upper management, and between co-workers themselves, constructive feedback	Strong	People involvement	Strong	“mass communicative” (Hameleers, 2021)
Employment relations (Carnevale & Hatak, 2020)	Growth of professional relationships to work collaboratively and productively	Moderate	Teamwork	Weak	People involvement

Table 5

State of LSM tools performance for the two case studies based on the interview

LSM tools	Case study #1	Case study #2
TQM	Sufficient state of performance (accepted by employees without obstacles); 80%	Not introduced at all
Kaizen	Not introduced at all	Insufficient state of performance (doubts and hesitations connected with introducing the tool); 49%
PDCA	Not introduced at all	Sufficient level of performance (moderate acceptance by employees); 65%
Ishikawa	Not introduced at all	Insufficient state of performance (weak knowledge about the tool among employees at first made it difficult to introduce); 40%
Six-Sigma	Sufficient state of performance (moderate approach to the tool); 65%	Not introduced at all
Teamwork	Sufficient level of performance (promoted by all the staff); 70%	Sufficient level of performance (promoted by all the staff); 80%

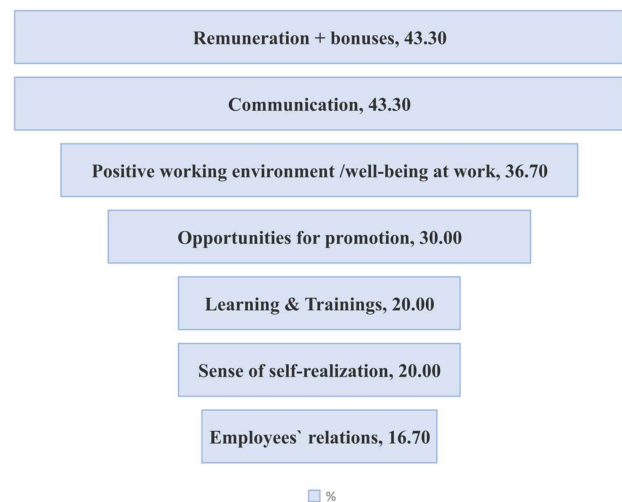


Fig. 3. Factors that will most motivate employees (in %)

ated depending on their education level ($p = 0.044$). The higher educated respondents the higher agreement in relation to their qualifications and education. The dependency has achieved a medium strength ($V_{Cr} = 0.40$), what is outlined in Table 7.

Factors influencing getting bonuses at workplace were slightly differentiated in the opinions of female and male respondents although the difference oc-

Table 6

Satisfaction with currently received remuneration for work vs. job seniority for analyzed 2 hotels (30 respondents in total)

Satisfaction with the present remuneration	up to 2 years		2-4 years		Total	
	N	%	N	%	N	%
Yes	13	65	5	50	18	60
No	7	35	5	50	12	40
Total	20	100	10	100	30	100
Significance (p)	$\chi^2(1) = 0.62; p = 0.429$					

N – no. of observations; % – percent

χ^2 – result of Pearson’s chi-square test; p – significance level

Table 7

The adequacy of respondents’ current remuneration towards their skills and competences

Present remuneration vs. professional skills and education		Yes	No	Total	Significance (p)
		N	%	N	
Primary and vocational education	N	2	4	6	$\chi^2(2) = 4.71$ $p = 0.044$ V Cr = 0.40
	%	33.3	66.7	100	
Secondary education	N	8	8	16	
	%	0.5	0.5	1	
Higher education	N	7	1	8	
	%	0.875	0.125	1	
Total	N	17	13	30	
	%	0.567	0.433	1	

curred statistically insignificant ($p = 0.094$). Nevertheless, it has been observed that men pointed more often on work quality but according to females’ opinions the more important occurred level of engagement and availability (Fig. 5).

The analysis of the correlation between the assessment of the system of motivating and the respondents’ age has given a rise to an observation that the older the respondents the more frequently the non-financial system of motivating was deemed better. The younger employees (until 2 years; see Fig. 5) more frequently indicated the financial system of motivating to be better (see Fig. 6). The dependence was statistically significant ($p = 0.012$) and was a strong dependence (V Cr = 0.54).

The selected results have been presented and discussed in terms of motivational factors’ analysis and their dependencies or relation from lean staff management perspective. There have been presented eight

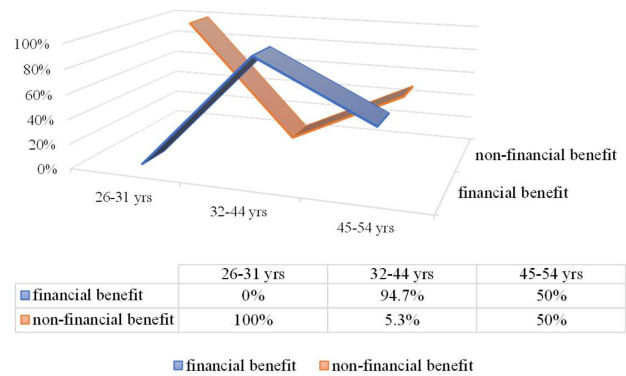


Fig. 4. The type of system of motivating perceived by the respondents as a better one vs. the respondents’ age

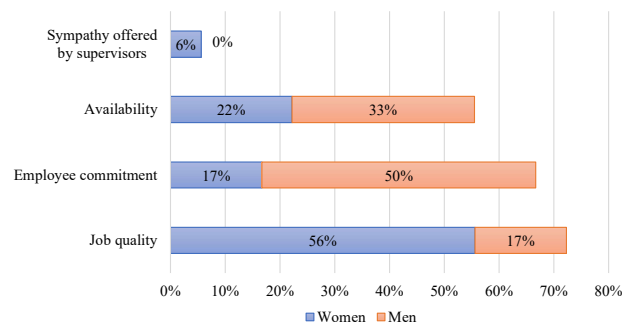


Fig. 5. Factors perceived as influencing a work bonus being awarded vs. gender of the respondents

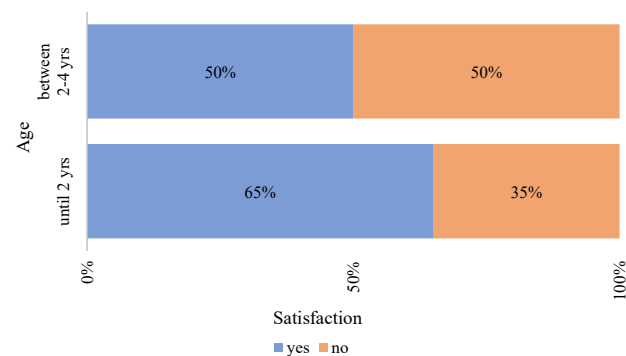


Fig. 6. Satisfaction with the remuneration depending on work experience

factors influencing employees’ behaviours and attitudes towards the company they work for. There have also been shown relations between selected factors and lean staff management tools (Table 4) as well as benefits and concerns of LSM tools in both case studies (Table 8). The LSM tools used in the two analysed case studies were different and it is hard to compare the results in a linear and direct way. Nevertheless, it has been observed that three LSM tools (Kaizen, PDCA, and Ishikawa) were not introduced in case #1,

Table 8
 Expected selected benefits and concerns of motivating factors from perspective of staff lean management for value generation for employee assets in the COVID-19

	Benefits & tools realization	Concerns
Workplace atmosphere	Increase in employee morale More efficient workers Rapid response to changes More ergonomic environment (fitting tasks to persons)	No safety and environmental protection regulations No well-being protection Employees productivity predictable and measurable (evaluation system)
Flexibility	Job commitment (Oláh et al. 2017) High work efficiency (Produção et al., 2019) Individual lifestyle Engagement and productivity	Human-robot interaction issues Unemployment threats Powerlessness Privacy issues Law and regulations imposed by the government
Remuneration	Increase of safety Better job satisfaction Improvement in employee morale	Unemployment and layoffs Cost-intense nature (bonuses) due to the Covid-19 Economic inequality (salary preferences dependent on job intensity) High personnel costs (social and economic) of pandemic for individual employee
Employees relations	Trust co-workers Support from colleagues and managers Increased team productivity No hierarchical relations between employees Turn the blame culture into positivity culture Moderating factors	Low-social distance Great stress level or burnout Less employee resistance Loneliness
Communications	No remote work or virtual teams as a positive context Solving conflict and coordination Motivating people to the new environment	Low communication Low social commitment due to the COVID-19 No social technology to be used in the workplace (a limited access to virtual communication solutions)
Learning & Trainings	Training employees for sufficient lean skills Fitting compensation plan with lean	Trouble with training to implement lean tools and adopt new standardized works Avoiding trainings in personal to adjust to the pandemic situation in service companies

whereas TQM and Six-Sigma tools were not used in case #2. According to the authors of the paper some tools, especially TQM should be implemented in every service company, but it is worth to underline that other tools are a kind of complement to those which are implemented in fact.

The results have depicted that for the most service companies, the level of remuneration and bonuses as well as communication have obtained the biggest values (both around 21%). It can be interpreted that these organizations place the highest emphasis on these factors, comparing to positive workplace environment (17.17%). Significant less attention has been put on possibilities of advancement with the value of almost 13.50% (sense of self-realization), reaching values for the rest of factors below 10% (Fig. 3).

The research results enable the authors of the paper to emphasize dependence, and importance of lean staff management tools in the creation of motivation systems in service companies, especially in those where employees have a direct contact with clients (front-desk employees in hospitality, gastronomy, transportation, tourism sectors).

Conclusions

The researchers have been trying to leverage lean practices of two case studies and sought to best understand the motivating factors in lean staff management that, in turn lead to increase employees' productivity. Moreover, the factors have been presented in terms of the chosen theory models presented in the source literature. The findings have indicated that service companies that have been implementing lean instruments more extensively are also more likely to social benefit from the effects of tools used being the results of the impact of COVID-19 on work environments. Nevertheless, the pandemic and corresponding social distancing does not appear to mediate the effects of lean tools on staff performance in terms of both quality service and employees' efficiency. The pandemic resulted in an unexpected increasing trajectory of a motivation of service personnel relative to their pre-pandemic peers (no differences in controlled motivation, and specific to autonomous motives) (Produção et al., 2019), although neglecting

unfortunately the results of studies that the COVID-19 decreased preferences of respondents in all investigated motivation factors (basic salary, job security, good working team, communication at work and superior's approach) (Hitka et al., 2021). More specifically, the respondents experienced the COVID-19 pandemic as a major life event, however, that this major life event did not impact significantly their motivation to continue working, what was confirmed by researchers in (van de Voort, 2021). In addition, the conducted research has made it possible to claim that Herzberg's two-factor theory was confirmed because the causes evoking fulfilment at work (responsibility, recognition, promotion) vary from those evoking dissatisfaction (working conditions, personal life, work atmosphere). The theory refers to the factors motivating employees to be more committed to perform orders as well as those which impeded meeting a particular objective.

The paper has presented the analysis of employee motivating factors, and their effects on staff lean management. Therefore, interviews have been conducted based on the identification of the research gap as the lack of most motivating factors affecting lean staff management in the service companies. The results provide evidence to support the main purpose of research, that the motivational factors in a lean implementation process can affect work efficiency and finally success of the process.

The conclusions from the case studies outlined as follows:

- the most satisfactory and significant system of motivating for the most employees has been the financial system (remuneration and bonuses all together – almost 21 per cent of respondents). It means that employees have highlighted that the salary plays an essential role in the current time. What is worth underlying is that the longer experience at work the lower significance of remuneration;
- the communication and employment relations are more and more important for the employees with the long experience and job seniority. It is visible especially in-service sector because human beings constitute a quality and essence of the service (20.70 per cent of the employees);
- nevertheless, the respondents have also valued the workplace atmosphere and a potential to be promoted to a better job position; so, the second most important motivational factor is positive teamwork environment which is equalled to well-being at work (almost 18 per cent of respondents). Opportunity to promotion and possibilities of advancement occurred the third most important motivational factor because it is connected with self-development being a potential to be promoted;

- the sense of self-realization was pointed by over 13.50 per cent of employees as one of the crucial motivating factors at workplace;
- the next factor which plays a significant role in motivating employees is learning and trainings opportunities for employees (almost 10 per cent of respondents indicated the factor as one of the most important);
- the equal treatment was important for over 7 per cent of employees
- it seems that employees' treatment depends on their position in the company, what can be ambivalent and dubious;
- the employees' relations also play a significant role in motivating process. Almost 7 per cent of the respondents pointed importance of their relations at work;
- the flexibility and adaptation to new conditions was also observed – it contributes to work efficiency increase and builds up in employees a growing willingness to work and identify with their company (almost 3.3 per cent of respondents).

In the period of the pandemic, work productivity depends on motivational factors, currently due to shift of most of office employees to home offices or hybrid environment (Urbancová & Depoo, 2021). An effect of social distancing has led to focus on the issue of lean staff management changing practices in organizational culture. These are concentrated on major investments in training, evaluation and follow up. In addition, the incorporation of trainings in lean management techniques for those that are already within the organization is a good practice to motivate employees.

Incorporation of lean in the staff management procedure requires to adopt measurable approach of employees that allows comparing their effort in appropriate time interval.

In this paper, not only the practical research has been applied, but also the theoretical perspective has been described to update the original instruments or knowledge that usually associated with lean management.

Because of editing limitations, the authors of the paper concentrated on the chosen factors that occurred to be the most important in service companies.

The research might constitute a part of future research concerning further motivational factors, which should be correlated with the performance indicators. This study should also be conducted not only in-service companies but also in the manufacturing that, contrary to appearances, play a significant role both for employers and employees. A focus is to define if there is also a statistically significant change in

motivating factors and the field of work environment. Therefore, according to conclusions, some actions are needed in service companies of further research aiming at:

- 1) identification of motivating factors, which should focus on to achieve better involvement of the staff,
- 2) increasing in job quality, competitiveness, and agility are hallmarks of a motivated staff that can embrace business performance; allowing to sustain competitive differentiation,
- 3) improvement of elasticity and employees' relations during tough times (such as COVID-19 pandemic),
- 4) building a competitiveness model for increasing staff lean management for service companies,
- 5) exploring an impact of leadership on lean management to update the knowledge of (van Assen, 2016).

The limitation of the research is that the interviews and surveys have been conducted for two service companies only. Analyses have been performed based on their case studies. However, the paper has addressed to investigate instead of seeking empirical generalization, what the motivating factors can be successfully affected lean staff management in a service process.

On the other hand, the measurement of the effect of motivating factors on staff management has been framed at one point in time, during the pandemic. It is recommended to do this research in the post-COVID-19 time to verify a business model of lean staff management. In this context, achieved results might be fully comparable to benchmark within staff management procedure. Moreover, LSM adoption entails significant organizational change which requires companies to properly manage the key factors that might influence the success of the adoption process.

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