Empowering Leadership and Employee Creativity: The Mediating Role of Psychological Empowerment

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Purpose: This paper tried to examine the mediation effect of psychological empowerment between empowering leadership and employee creativity.

Design/Methodology: This study referred to quantitative research design and used a paper-based online questionnaire to collect data from a sample of 65 employees drawn from an Information Technology company in Surabaya, Indonesia. This study used the SEM (Structural Equation Modeling) Partial Least Square analysis with saturated samples.

Findings: The results indicate that empowering leadership and psychological empowerment positively and significantly affect employee creativity. The results further reveal that psychological empowerment significantly mediating the relationship between empowering leadership and employee creativity.

Practical Implications: The findings of this study provide benefits for company leaders to identify learning solutions to practical solutions, motivate employees to come up with creative ideas, and empower employees. Mostly during challenging times such as during the COVID 19 pandemic, work must be done from home. The results of this study provide opportunities for leaders to produce techniques, policies, and strategies to increase employee creativity through motivation, direction, and empowerment.

Originality/Value: This study makes a new attempt to demonstrate the mediating effect of empowering leadership and employee creativity in Information Technology companies at Vascomm Surabaya Indonesia. In addition, the research underlines the importance of motivating and always giving employees freedom for creative behavior which is important knowledge in difficult times like today caused by the covid-19 pandemic.
Introduction

The Industrial Era 4.0 was realized by technological developments in various industrial sectors, the ease of information, and the development of the world's business environment that impacted changing strategies owned by every country around the world (Kementerian Keuangan, 2019). This change makes countries feel that they need other capital besides finance to deal with the changes that occur, but that talented and reliable human resources are needed in managing company resources (Sugiarto, 2019). Optimizing human resources in various countries requires competent skill competencies; this is what happened in Indonesia (Arief, 2019). Indonesia is trying to improve various industries by increasing its employees; one of these industries is the Information Technology industry, such as Vascomm. To develop a company to compete with other companies, it is necessary to utilize the potential of existing resources. Therefore, employees try to be equipped with skills. If the employees are skilled and reliable, they will develop their human resources (Mathis, 2002). An organization's performance can be improved in various ways, one of which is through the creativity of its employees (Firmandari, 2014). Creativity is believed to create competitive organizational abilities because creativity is needed by the organization to adapt to environmental changes and gain a competitive advantage in existing opportunities (Shalley et al., 2004).

A leader can do increasing employee creativity. The leadership style for each leader is different, one of which is empowering leadership. Empowering leadership is a capable leadership style increase creativity (Slatten, 2011). Empowering leadership is a leadership style that gives employees the freedom to make decisions independently (Forrester, 2000). Leaders with the Empowering Leadership style will encourage employees to take the initiative at work; the leader also guides employees on how to do an excellent job with the hope of achieving company targets (Amundsen & Martinsen, 2014). This is like what one of Vascomm did, always encouraging employees to take the initiative in their work. Besides that, leaders always direct employees to be professional in their work to achieve target goals with creative employee attitudes. However, there is the difference research about Empowering Leadership on Employee Creativity that Empowering Leadership has an insignificant influence on Employee Creativity (Roellyanti, 2015).

Apart from affecting Employee creativity, Empowering Leadership also has a positive effect on Psychological Empowerment (Zhang & Bartol, 2010). Other studies also explain that Empowering Leadership also has a positive effect on Psychological Empowerment (Al-madadha, 2014). Psychological Empowerment is also able to increase employee creativity (Javed & Arjoon, 2017). Amundsen & Martinsen (2015) explained that psychological empowerment affects job satisfaction and work effort but not with creativity. Self-leadership affects work effort and creativity but not job satisfaction. Besides being able to influence Employee Creativity directly, Psychological Empowerment can be a mediator between Empowering Leadership in Employee Creativity Al-Magadha (2014) and the research from Zhang & Bartol (2010). Based on the research background that has been stated, it can be seen that the objectives of this study are as follows: To test and analyze the effect of empowering leadership on employee creativity in employees of Vascomm Surabaya. To test and analyze the effect of empowering leadership on psychological empowerment on Vascomm Surabaya employees. To test and analyze the effect of psychological empowerment on employee creativity at Vascomm Surabaya employees. To test and analyze the role of psychological empowerment in Empowering Leadership towards Employee Creativity.

Literature Review

This study referred to the Component Theory of Individual Creativity (CTIC) (individual-level phenomenon) (Amabile, 1997). Empowering leadership referred to leadership theory (Liu et al. 2003) leaders target followers to develop their control. Employees are encouraged to participate in decision-making, directed to innovate independently. Company leaders give employees the authority to carry out work by always encouraging
employees to take the initiative. Leaders motivate to build self-confidence in their employees. Empowering leaders are essential to technology innovation companies like Vascomm Surabaya Indonesia. This leadership empowerment will make employees always be given the freedom to think and do something useful so that there is a feeling that someone’s job is personally meaningful, and employees are confident in their ability to perform tasks successfully. This leadership empowerment theory is meaningful because it will be able to encourage competence, employee involvement, and employee participation to channel new ideas, especially at Vascomm Surabaya Indonesia, which is always demanded that employees should be creative and solve problems independently.

Empowering Leadership and Employee Creativity
Empowering leadership is developing four leadership typologies, including directive leadership, transactional leadership, transformational leadership, and empowering leadership (Pearce et al., 2003). Empowering leadership is a leadership style that gives employees the freedom to make decisions independently (Forrester, 2000). It is also argued that empowering leadership enables a condition experienced by employees that they feel meaningful about their work, further giving autonomy and expressing confidence in employees' abilities, and removing obstacles in decision-making to improve employee performance (Zhang & Zhou, 2014). Empowering leadership has a fundamental influence on creativity. This leadership style explains that leaders provide motivation and investment to employees (Zhang & Bartol, 2010). The results of other research conducted by Slatten (2011) also support that the use of variables empowering leadership, humorous work climate, creativity, and innovative behavior with the results of empowering leadership and humorous work climate has a strong positive effect on employee creativity. Byun & Kang (2016) ’s research has a significant positive effect of empowering leadership for creativity. The study was conducted on 224 prospective employee leaders who work in South Korean companies. In this study, it is explained that in a situation of high task visibility, Empowering leadership prioritizes creativity for employees with low motivation rather than high motivation.

Empowering leadership is a process of influencing subordinates through power-sharing, directing work independently, developing self-control, and innovating to make decisions independently. Empowering leadership was carried out by the leadership of Vascomm Surabaya to their employees by providing office motivation, assignments, giving freedom in the process.

H1: Empowering leadership has a significant positive effect on employee creativity

Empowering Leadership and Psychological Empowerment
Empowering leadership also has a positive effect on Psychological Empowerment (Al-madadha, 2014). While the indicator measurement from Psychological Empowerment is used (Spreitzer, 1995), there are four indicators: meaning, competence, self-determination, and impact. Al-madadha (2014) explained that Empowering Leadership was significantly positive for Psychological Empowerment. all indicators claim to affect empowering leadership. Measuring indicators of Empowering Leadership use Ahearne & Rapp (2005), those are Increasing the meaning of work, Fostering participation in decision making, Expressing confidence in high performance, and providing autonomy from bureaucratic constraints. The conclusions of several expert theoretical opinions are empowering leadership will improve psychological empowerment because leaders will provide direction and authority so that employees will be able to empower their thinking for good performance.

H2: Empowering leadership has a significant positive effect on psychological empowerment

Psychological Empowerment and Employee Creativity
Javed & Arjoon (2017). explained that psychological empowerment increases employee creativity. Psychological Empowerment research indicators use Spreitzer (1995), which indicators are not mentioned in the journal. Meanwhile, Employee Creativity used indicators from George & Zhou (2001). Another supporting research is
Al-madadha (2014) that psychological empowerment has a positive impact on employee creativity. The indicator used is Spreitzer (1995) there are four indicators, namely meaning, competence, self-determination, and impact. The indicator of creativity referred to George & Zhou (2001) with 13 indicator items.

Employee creativity is an attempt to bring out new and original things in innovative ways. Employee creativity in Vascomm is useful for doing other creative endeavors in terms of creating new products.

H3: Psychological Empowerment has a significant positive effect on Employee Creativity

**Mediating Role of Psychological Empowerment**

Zhang & Bartol (2010) explained that Psychological Empowerment could be a mediating variable. The study revealed the influential mediating role of psychological empowerment on intrinsic motivation variables and creative processes engagement. Another study conducted by Javed & Arjoon (2017) also explained that Psychological Empowerment was able to mediate the relationship between Ethical Leadership in Employee Creativity with a bootstrapped value of 95%. in Ethical Leadership using indicators from Brown et al. (2005), ten items. Psychological Empowerment uses Spreitzer (1995), and Employee Creativity uses 13 item indicators (George & Zhou, 2001). When employees feel useful and believe that they will create the desired results through their actions, they can focus on specific challenges with more certainty. The employee shows more intention to take risks and come up with more unique ideas. Therefore, it is expected to show a higher level of creativity in their work. Psychological empowerment was found to mediate the relationship between ethical leadership and employee creativity. Thus, ethical leaders must enable employees to meet three basic psychological needs related to competence and autonomy. This will promotes psychological empowerment.

Psychological Empowerment is a person’s psychological state manifested through meaning, competence, self-determination, and impact in carrying out work for organizational practices in Vascomm.

H4: Psychological Empowerment has a mediating effect on Empowering Leadership and Employee Creativity

**Research Methodology**

**Study Design**

This research used quantitative research methods. According to Arikunto (2006), quantitative research includes: objectives, approaches, subjects, samples, dependable data sources, and has been detailed from the beginning, samples are used, and the results of the research apply to the population. The research method describes the type of research, obtaining data, and data analysis are straightforward. Those are the steps and expected research results. The analysis is carried out after all data have been collected. This study examined and analyzed the role
of psychological empowerment as an intervening variable between empowering leadership in employee creativity.

Sample
The study population was 65 employees of Vascomm Surabaya Indonesia, who worked in various positions. The sampling technique used was saturated samples. The research variables include the independent variable, the dependent variable, the mediating variable. The independent variable is empowering leadership. The dependent variable is employee creativity; the mediating variable is psychological empowerment. The questionnaire data used statements from several experts distributed to Vascomm Surabaya Indonesia employees online. Background characteristics related to employee gender, education, age, and experience. Employee gender is measured by the number of male and female respondents are categorized as 1 and 2. Employee age is measured by analyzing three age categories, those 20-25 years, 26-30 years, and those above 30 years. Education level is measured at the senior high school level, diploma level, Bachelor's degree, and postgraduate levels. Furthermore, employee experience is measured by the following experience ranges; less than one year, 2-5 years, and more than five years. Response scores were elicited on a 5-point Likert type scale scored as follows: 1-strongly disagree; 2-disagree; 3-neutral; 4-agree, 5-strongly agree.

Variable Measurement
Measurement of empowering leadership using (Amundsen & Martinsen, 2014), there is 9 item. Employee creativity uses the measurement from (Farmer et al. 2003): employees always try new ideas and methods; employees can always solve every problem, and employees can produce breakthroughs related to work. While psychological empowerment using Spreitzer (1995), there are eight items.

Data Analysis
The validity test is used to measure whether a questionnaire is valid or not. A questionnaire is valid if the questionnaire questions can reveal something that will be measured by the questionnaire. Simultaneously, the reliability test is a tool to measure a questionnaire that is an indicator of the variable. A questionnaire is reliable or reliable if someone's answer to a statement is consistent or stable over time (Ghozali, 2014). This research also uses descriptive analysis. Descriptive statistics are used to analyze by describing the data that has been collected without intending to make conclusions or generalizations Sugiyono (, 2017). The statistic will be suitable if the sample is taken from an exact population, and the sample taken is done as a whole. The research hypothesis testing was carried out with the Structural Equation Model (SEM) using the partial least square (PLS) analysis method supported by computer software, namely the smart PLS program. Partial Least Square (PLS) is a powerful analysis method because it can be applied to all data scales, does not require many assumptions, and the sample size does not have to be large. Partial least square (PLS) can not only be used as confirmation of the theory. Still, it can also be used to explain whether or not there is a relationship between latent variables (Ghozali, 2014).

Results
Out of the 65 questionnaires given, all of those are back. The study's background characteristics presented in Table 1 revealed the following: Most of the respondents were males (66.2%) female (33.8%). Respondents were mostly of the Bachelor's degree level (70.3%) or diploma level (21.5%). According to age, most respondents ranged from 20 to 25 years old (55.4%). Moreover, 43 had an experience of 2-5 years (66.2%).

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>43</td>
<td>66.2</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>33.8</td>
</tr>
</tbody>
</table>
Figure 2 and Table 2 explain that convergent validity can be accepted. Check the size of all latent variable items was found to be a useful parameter. External analysis for each indicator and AVE results have met the requirements. on the other hand, the composite reliability and Cronbach's alpha exceed the recommended cut-off values

### Table 2: Specified Measurement Model

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th>Indicator / item</th>
<th>Convergent Validity</th>
<th>Internal Consistency</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior secondary school level</td>
<td>3</td>
<td>4.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>diploma level</td>
<td>14</td>
<td>21.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>46</td>
<td>70.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgraduate levels</td>
<td>2</td>
<td>3.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-25 years</td>
<td>36</td>
<td>55.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26-30 years</td>
<td>25</td>
<td>38.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 30 years</td>
<td>4</td>
<td>6.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>14</td>
<td>21.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-5 years</td>
<td>43</td>
<td>66.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 5 years</td>
<td>8</td>
<td>12.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 2 - Measurement model**
The significance level test shows that the t-statistic for all paths uses the SmartPLS 3.0 bootstrap function. Based on the assessment of the path coefficient as shown in Figure 3, it was found that two direct relationships had a t-statistic value > 1.96, which was significant, and one relationship was not significant because t-statistic value > 1.96.

Table 4: Hypothesis Testing for Direct Effect

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Original Sample</th>
<th>T-Statistics</th>
<th>P-Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowering Leadership and Employee Creativity</td>
<td>0.043</td>
<td>0.159</td>
<td>0.874</td>
<td>H1 Reject</td>
</tr>
</tbody>
</table>
Empowering Leadership and Psychological Empowerment

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Original Sample</th>
<th>T-Statistics</th>
<th>P-Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Empowerment</td>
<td>0.744</td>
<td>2.727</td>
<td>0.007</td>
<td>H3 Accept</td>
</tr>
<tr>
<td>Empowerment and Employee Creativity</td>
<td>0.908</td>
<td>29.760</td>
<td>0.000</td>
<td>H2 Accept</td>
</tr>
</tbody>
</table>

Analysis of hypothesis testing in table 4 for the direct effect shows that empowering leadership does not affect employee creativity. This can be seen from the data, which shows that the t-statistic value is 0.159, which is less than 1.96, so that H1 is rejected. The value of t-statistics on the effect of empowering leadership on Psychological Empowerment is 29. 760 > 1.96. This shows that there is a significant influence on the Empowering leadership variable on Psychological Empowerment. At the same time, the coefficient estimate is 0.908. The coefficient has a positive sign, which means that the higher the leadership empowerment, the higher the psychological empowerment, so H2 accepts. The value of t-statistics on the effect of psychological empowerment on employee creativity is 2.727 > 1.96. This shows that there is a significant influence psychological empowerment variable on employee creativity. At the same time, the coefficient estimate is 0.744. The coefficient has a positive sign, which means that the higher the psychological empowerment, the higher employee creativity, so H3 accepts.

**Table 5. Hypothesis Testing for Indirect Effect**

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Original Sample</th>
<th>T-Statistics</th>
<th>P-Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowering Leadership, Psychological Empowerment, and Employee Creativity</td>
<td>0.676</td>
<td>2.713</td>
<td>0.007</td>
<td>H4 Accept</td>
</tr>
</tbody>
</table>

The Bootstrapping analysis of Table 5 has shown that psychological empowerment's indirect effects are significant with t-statistics of 2.713. Therefore, it is concluded that the mediation effects of indirect effects psychological empowerment are statistically significant.

**Discussion**

Hypothesis 1, the results reveal that empowering leadership has no significant effect on employee creativity. The interpretation of the results is that even though the leader applies an empowering leadership style, it does not affect their performance. These results contradict previous research (Slatten, 2011; Zhang & Zhou, 2014; Byun et al. (2016), which found a positive direct relationship between empowering leadership and employee creativity, **H1 rejected**. The statistical analysis results obtained: β = 0.043 with t-value 0.159, empowering leadership has no significant effect on employee creativity. At the same time, the estimated coefficient value tends to be positive. However, it does not significantly impact. Based on online interviews with several respondents / online questionnaire participants, this happened because the work process was carried out online, such as meetings, discussions during the Covid-19 Pandemic. Motivation or direction from the leader is often less precise when compared to face to face meeting. Characteristics of respondents based on age also note that the maximum number of employees aged 20-25 years is 36 or (55.4%). At that age, employees are often confused about leadership instructions and the need for a strong emotional connection. Also, it is known that there are other factors besides leadership style that affect employee creativity, one of which is peer support. Colleagues who continue to motivate and share knowledge create a relaxed mind and can think clearly, which will lead to new ideas in the completion of work. Other things can be done to create creativity, including holding informal meetings outside office hours to create intimacy for each individual. This is because employees are
always tense during discussions, so they don't enjoy it. Holding activities outside office hours or holidays will create a relaxed atmosphere and be used as a medium for sharing colleagues.

In hypothesis 2, the results reveal that empowering leadership has a significant positive effect on employee creativity. These results explain that the better the empowering leadership style, the employee will have very high creativity. This is consistent with the arguments presented by (Al-madadha 2014) **H2 accepted**. The statistical analysis results obtained: $\beta = 0.908$ with $t$-value 29.760, empowering leadership has a significant effect on employee creativity.

The increase in psychological empowerment is due to the leader's attitude who motivates, directs, and provides solutions; the impact is to build self-confidence in creative thinking, as in the psychological empowerment indicator, namely competence. The leader in Vascomm always motivates so that every employee can complete their tasks correctly. Through this motivation, the leader also gives employees the freedom to continue developing their skills by reading books or online courses useful in empowering their potential.

The meaning indicator, which means meaningful, is that employees must interpret this work as very important. The impact is when there are problems so that they can still identify problems and find creative solutions. Leaders also always encourage employees to take the initiative at work. Also, during meetings with leaders, employees are motivated to appreciate the work process with confidence. So that employees have the confidence to behave creatively because of the encouragement of themselves and their environment, the leader also emphasizes the priority scale of work to focus on doing something that can be obtained.

Hypothesis 3 the results reveal that psychological empowerment has a significant positive effect on employee creativity. These results explain that the better the psychological empowerment, the employee will have very high creativity. This is consistent with the arguments presented by (Javed & Arjoon, 2017). **H3 accepted**. The statistical analysis results obtained: $\beta = 0.744$ with $t$-value 2.727, psychological empowerment has a significant effect on employee creativity.

This research shows that employees' psychological empowerment is good; they can interpret their work, trust in a person's ability to perform tasks successfully, the perception of freedom to choose how to start and carry out tasks, and the view that one's behavior at work will affect work. When everything is coordinated within employees, employees can enjoy their work and create new ideas. Thus, the high psychological empowerment possessed by Vascomm Surabaya employees can increase employee creativity in doing their job.

For Hypothesis 4, the mediating relationship was introduced when psychological empowerment mediates between empowering leadership on employee creativity. The argument is that with an empowering leadership style will create psychological empowerment that positively affects employee creativity. This is consistent with the arguments presented by (Zhang & Bartol 2010; Javed & Arjoon, 2017). **H4 accepted**. The bootstrap analysis shows that the indirect effect of the psychological empowerment variable: $\beta= 0.676$ is significant, with a $t$-value of 2.713. The hypothesis testing results show that psychological empowerment intervenes in the influence of empowering leadership on employee creativity. The analysis of this research can provide information that if the leader has motivated, directed, and empowered employees, it will make meaning in interpreting work, confidence in one's ability to successfully perform tasks, and the perception of freedom to choose how to start and carry out tasks to be able to make employees creative because they can look for breakthroughs in work, solve problems and have new ideas.

**Managerial Implications**

The findings reported in this study are significant because the value of the leadership empowerment relationship is the desire to improve creative work behavior through employee psychological empowerment. This knowledge
is very relevant to stakeholders and leaders, especially in these difficult times, COVID 19. Leaders must always motivate meetings, and employees must always look for new ideas in their work even though they work from home. By strengthening the empowering leadership relationship between employees and their leaders, to increase productivity, employee loyalty, creativity, employee confidence, and solve problems independently. Also, through research findings, individuals who assigned to leadership positions are made aware of traits such as honesty without ambiguity, empathy for employees, flexibility and adaptability, active listening to employee complaints, and humility, which are expected to be highly relevant in this COVID 19 period (Brownlee, 2020).

Limitations
This study's main limitation lies in using data obtained only from Information Technology companies with a small sample of Vascomm Surabaya Indonesia. It would be better if it was done with a broader coverage area or even if there were elements of cultural differences. The organizational structures in these companies must be different from those in other locations because there is intense competition between companies in the Era of 4.0 to innovate with each other about technology that can increase employee creativity. Second, by relying entirely on questionnaires given to employees only, this study failed to consider supervisors and managerial staff's views in general. Third, this research was conducted online, not directly to monitor filling out the questionnaire.

Conclusion
This study is an explicit attempt to understand leadership empowerment's role in spurring employee creativity at information technology company Vascomm in Surabaya, Indonesia. Leadership empowerment was found to have no direct effect on employee creativity. This study provides evidence that leadership empowerment does not directly create employee creativity. Managers need to be in the spotlight in continuing to develop employee creative effects. The leadership also gives employees the freedom to continue developing their abilities by reading books or online courses useful in empowering their potential. Employees are required to interpret this work is very important; the impact is when there is a problem so that they can still identify problems and find creative solutions. Leaders also always encourage employees to take the initiative at work. Also, in meetings with leaders, employees are motivated to appreciate the work process confidently. Employees have the confidence to behave creatively because of the encouragement from themselves and the company environment. However, for other representation, future studies should look to broaden the geographic scope of the study to include information technology companies from other countries.

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Conflicts of Interest: The authors declare no conflict of interest

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