INTRODUCTION

The Service Industry is increasing in Puerto Rico based on the Government data. Therefore, this research has the purpose of identifying how the companies in this industry are applying Continuous Improvement (CI). As additional information, it was researched which laws are positively and negatively affecting this industry. The methodology applied for this investigation was Mixed Methods with a Qualitative Phase and then a Quantitative Phase.

OBJECTIVES

Document the following topics:

- CI Methodologies applied
- Identify CI Tools applied
- Benefits for companies
- Barriers faced during the implementation
- Laws benefiting and affecting negatively to their development

BACKGROUND

Puerto Rico has a historic problem with the administration of its government which has led to a massive public debt.

Employment in the Service Industry in PR is expected to increase by 12.73% from 2012-2022 based on the projections of the Department of Labor of PR (Soto Pérez et. al, 2014).

Benefits of CI practices includes (Bedgood, 2017):
- Increased Income
- Reduced Expenses
- Higher Employee Morale
- Increase Productivity

The barriers faced when implementing CI practices are (Redman et al., 1995):
- Additional Bureaucratic Processes
- Resistance to Change by employees and managers from multiple levels
- Lack of Funds for necessary Investment

QUALITATIVE PHASE

The main goal of this phase was to perform interviews regarding the application of CI in companies within the service industry and about the Economy of PR with economists.

Five interviews to companies were conducted with the main information gathering being the following:

Small Business (1-24 employees) - Large business (25 or more)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Small Business</th>
<th>Large Business</th>
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<tbody>
<tr>
<td>CI Application</td>
<td>No CI Culture</td>
<td>ISO 9001 Certified</td>
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<td></td>
<td>Vague Process Reengineering</td>
<td>Process Reengineering</td>
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<td></td>
<td>Verbal Voice of the Customer</td>
<td>Lean - Six Sigma</td>
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<tr>
<td>Tools</td>
<td>No Official 5s Implementation</td>
<td>Vague Kaizen Implementation</td>
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<td></td>
<td>Focal Groups</td>
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<td>Benefits</td>
<td>Process Simplification</td>
<td>Documentation Improvement</td>
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<td></td>
<td>Task Time Reduction</td>
<td>Task Time Reduction</td>
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<td></td>
<td>Customer Loyalty</td>
<td>Minimizing Accidents inside the workplace</td>
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<td>Barriers</td>
<td>No structured business plan</td>
<td>Employee Resistance to Change</td>
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<td>Funds for Investment</td>
<td>Communication</td>
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<td>Time to dedicate to Improvement Projects</td>
<td>Employees doesn’t recognize CI terminologies</td>
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Two well-known Puerto Rican economists were interviewed regarding the Island’s economy. His conclusions were:
- Puerto Rico has a historic problem with its government administration leading it into amassing a debt based on credit for operational costs.
- Emigration is a barrier but also an opportunity to export products and services out of the island’s market.
- The Private Sector is key to stimulate Puerto Rico’s economy.

Quantitative Phase

Based on the sample obtained the 53% of the small business sampled have no knowledge about what is Continuous Improvement Culture. However, the large ones have more knowledge in Continuous Improvement Culture (62%) and the quality tools that are used. According to the survey results and the interviews the application of these tools not necessarily were appropriate.

Finally, we note that Puerto Rico has a great opportunity to educate the service business sector in continuous process improvement culture and their tools. With that application is expect a higher level of services, reduce operating costs, employees more motivated and customer more satisfied.

CONCLUSION