HOW UTILITIES CAN USE GAMIFICATION TO ENGAGE CUSTOMERS AND CULTIVATE LOYALTY
Deregulation of power utilities globally has contributed to an increase in the number of retail distributors. This has resulted in intense competition among utilities who need to engage customers more deeply to retain them.

In a 2015 report, Ofgem, the British regulator for electricity and gas markets, revealed that the utility industry registered a customer churn of 13%. Attrition of customers from one service provider to another increased further to 15% in 2017, and 18% in 2018. In the European Union, the average customer churn annually is between 12% and 15%, which is set to increase further because of recent initiatives such as adoption of smart meters and faster switching of energy suppliers. In New Zealand, the figure is as high as 20-25%.

The main reason (89%) for customer churn is due to a subpar customer experience and lack of customer loyalty programs. With a huge churn ratio, it has become imperative for utility companies to find ways to engage their customers. The high churn rate can be reduced by cultivating customer relationships and establishing loyalty programs.

One way of cultivating customer loyalty is by keeping customers engaged through gamification.

Gamification is a technique which uses elements and ideas from the gaming industry to increase customer engagement and influence their behavior. Gamification techniques not only help in engaging customers, but can also be used to increase brand loyalty, as well as enhance customer motivation.

### Contribution of game mechanics

- **User Engagement**: 47%
- **Brand Loyalty**: 22%
- **Brand Awareness**: 15%
- **Training**: 7%
- **Motivation**: 9%
- **User Experience**: 47%

Source: M2 Research
Gamification techniques are widely used by e-commerce and retail companies to engage customers, enhance customer loyalty, change their consumption behavior, and align business strategy with shifts in customer behavior. Similarly, the retail electricity sector can benefit from using gamification techniques to engage and retain their consumers.

Once an electricity retail / distribution company leverages the benefits of gamification, the biggest challenge is how to design it and where to implement gamification so they gain maximum business value from the whole process. Infosys designed a gamification pyramid, a framework which enables electricity distribution / retail companies to better understand components of gamification, so they can implement it for customers.

The components of Gamification Pyramid are illustrated below:

**Fig 1: Gamification pyramid**

1. **Feedback and information sharing**
   The gamification journey can be initiated by establishing a communication channel. It is represented at the bottom of the pyramid as ‘feedback and information sharing.’ It is the foundation of gamification and the entire pyramid revolves around it. How you define the means of sharing information and gathering feedback determines the approach for engagement. Effective customer interaction is possible if the information is clearly articulated, honest, precise, and visible to motivate customers to participate.

   Currently, electricity retail / distribution companies already have multiple, well-established communication channels to share information with customers, such as bill printouts, SMS, e-mail, social media (Facebook, Twitter, WhatsApp), newspapers to share new tariff plans, energy conservation initiatives, and energy profiles.

2. **Displays and user interface**
   Visuals also play a vital role in attracting customers and ensuring that they use the gamification tools. The second component of the gamification pyramid is development of displays and user interface. The display element is one of the critical components in game mechanics for engaging customers as it keeps the customers updated on their progress and achievements. These displays and interfaces should be visually attractive, be able to communicate meaningful messages and align with goals of the game.
The display should update customers on their progress via:

- Dashboards
- Leadership board
- Progress bar
- Degree of control

3. Performance status

A vital component of the pyramid is measurement. It is important for both customers and energy suppliers as awareness of their performance motivates the customer to increase participation, and guides the company to fine-tune their offerings, programs, and game to achieve their business objectives. Once the display and UI are developed for gamification, it is important to design the parameters to be chosen for measurement of progress in game mechanics. The performance status component helps define the parameters to be developed for providing the status of the customer performance. Parameters for performance monitoring include:

- Goals
- Points
- Levels
- Badges

When the customer is enrolled in gamification activities, (s)he achieves levels, badges, and points based on the progress made in activities.

The Nissan Leaf electric vehicle is a good example of the use of gamification to promote charging during non-peak hours. The driver who consistently charges his EV during non-peak hours is awarded badges. Multifold peak hour avoidance badges are awarded to users who do not charge during peak hours. These badges work well to encourage users not to charge their EV during peak times in summer (or winter) when demand on the grid is at its highest. This system of awarding badges – a form of gamification – successfully brings about a change in the behavior of Nissan’s EV customers.

4. Rewards

Rewards are one of the major drivers in gamification. Consistent performance earns rewards. The rewards could be tangible ones such as cash back, gift vouchers, or it could be intangible such as badges, a sense of achievement or social recognition. Rewards should be well designed so that they keep customers engaged, and attractive enough to change customer behavior. Tangible rewards can be monetary or non-monetary. Non-monetary benefits include discount coupons, discounts on electricity bills, movie or concert tickets. Customers can also be given virtual currency as a part of rewards for their involvement. Energy conservation and DSM (demand side management) provide the best use case to reward a customer as his action reduces energy production as well as demand for electricity.

**Rewards can cover:**

- Virtual currency
- Discounts in electricity bills
- Prizes and awards
- Commendation certificates

5. Social collaboration and competition

According to Maslow’s ‘hierarchy of needs’, self-esteem and self-actualization are at the top of the needs pyramid. It holds true for the gamification pyramid as well. Once a consumer’s needs are fulfilled by rewards, (s)he looks for something attractive to associate with, which increases self-esteem, and provides a feeling of self-actualization. To achieve these, the gamification pyramid has social collaboration and competition at the top.

Components for social collaboration and competition include:

- Energy communities
- Collaboration
- Competition

This layer of gamification must be designed to ensure that the consumer is engaged, collaborates and contributes to the initiative of the electricity distribution companies. With social media touching every thread of society, collaboration and competition between customers have become very easy. Creating a community of likeminded consumers brings a sense of togetherness, whether in a gaming environment or a community of electricity distributor customers.
Where Gamification can be implemented

Once the distribution company identifies how it can design the gamification initiative, it should identify the processes which can bring maximum value.

Gamification can be used in the electricity retail sector to facilitate several processes of the value chain:

- Increasing loyalty of customers
- Skill enhancement of employees
- Marketing and promotion of new products
- Behavior changes of customers
- Increasing employee productivity

Fig 2: Gamification impact in electricity retail sector
Utility enterprises can explore several use cases to gain maximum value from gamification.

1. Promotion to increase usage of green energy / renewable energy
Electric utilities are trying to encourage their customers to opt for green and renewable energy. Gamification is a smart tool to change customer behavior. The more a consumer opts for green energy, the more points or badges (s)he can earn, which can then be converted into discounts or rewards after achieving a certain amount of points or badges.

2. Promotion for conservation of energy
High electricity consumption is a critical problem for many utilities. Gamification can be used for incentivizing customers to conserve energy (electricity). The cooperation and competition components of gamification motivate users to achieve energy efficiency goals. It can be used to promote energy conservation among individuals or in a community.

3. Enrollment in DSM (Demand Side Management) activities
A major push by utilities is persuading consumers to opt for critical peak pricing. It is a method used by utilities to better manage their demand by moving non-critical load to non-peak hours. Money saved is the biggest incentive to drive this initiative by utilities. Gamification can be used to provide more visibility and incentives for customers to opt for critical peak pricing.

SmartCharge rewards are part of the gamification program developed to promote electric vehicle (EV) users to opt for critical peak pricing by shifting the charging of their vehicle to non-critical hours. The utility can devise six badges for their consumers based on their involvement in critical peak pricing events which can be showcased on social media such as Twitter or Facebook.

4. Increasing employees’ engagement, motivation, and learning
Gamification offers motivation for increasing employee engagement and learning. Many companies are investing in reskilling and training of their employees, and they want their employees to adopt these initiatives. Gamification can motivate their employees to take up more training to reskill themselves. For each new skill achieved by an employee, a badge is awarded, which can be showcased in the employee profile, and earn prizes based on the number of badges earned.

5. For promoting new products and plans
With intense competition in the electricity retail / distribution market, companies are trying to retain customers as well as attract new ones by introducing new products and plans, which can be shared with customers. It can be done through gamification by rewarding customers though badges (virtual medals).
According to ReportLinker – TechSci Research, the gamification market in 2018 was worth US$ 6.8 billion and is predicted to register a growth of 32%, reaching US$ 40 billion by 2024. Companies such as Nike, McDonald’s and Target have adopted gamification for successfully engaging customers.

According to Training Journal, 75% of the global workforce by 2025 will consist of millennials – a generation that grew up on digital devices and video games. So, gamification at the workplace will become mainstream with millennial employees.

Electricity retail companies who are challenged by customer attrition can use gamification to increase customer engagement and customer loyalty. These companies can leverage gamification to engage their customers and change their behavior. Our Gamification framework for electricity retail companies will help companies to implement gamification in their day-to-day operations with convenience & agility.

Conclusion
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References

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