GAMIFICATION FRAMEWORK WITH REFERENCE TO BUSINESS PERSPECTIVE

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ARTICLE INFO	ABSTRACT
	Purpose: The purpose of this manuscript is to develop and present a gamification framework with eight gamifying mechanics for the business environment and delineate how these mechanisms are different in-game and business/workplace considering gamification as an application of games in non-gaming contexts. **Theoretical framework:** The gamification mechanics has eight framework elements –meaning, accomplishment, ownership, scarcity, employment, social influence, unpredictability, and avoidance. Each framework element has 4 sub-elements. Every framework element has described in detail where do they appear in the game vs where do they appear in the business/workplace and their relevance. **Design/methodology/approach:** The eight-element gamification mechanics framework developed considering the business in e-commerce industry. Each and framework element was dissected and developed considering in business/workplace environment in parallel with the gaming environment under non-gaming contexts. **Findings:** The study resulted in the development gamification mechanics framework for a business environment which can be applied in any business environment and workplace. **Research, Practical & Social implications:** The developed gamification mechanics framework can be used in any business environment/workplace for performance improvement and enhancing employee engagement. We have provided a detailed description of each gamification mechanics framework element, however. The sub-elements may vary from organization to organization and business to business. Before applying this framework the organization should review the framework along with the organization business goals and decide the course of action. **Originality/value:** The study offers the business and other organization to implement the gamification framework with eight elements for organizational growth, employee engagement Doi: https://doi.org/10.26668/businessreview/2022.v7i5.702

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ESTRUTURA DE GAMIFICAÇÃO COM REFERÊNCIA À PERSPECTIVA DE NEGÓCIOS

RESUMO
Objetivo: O objetivo deste estudo foi identificar o perfil da pesquisa acadêmica sobre blended learning no mundo e propor uma agenda de pesquisa para o tema.
Referencial teórico: A literatura recente tem relatado bons resultados tanto no desempenho dos alunos quanto na satisfação dos estudantes no blended learning (Dziuban et al., 2004). No entanto, ainda há muito o que investigar e aprender sobre o BL por ser um desenvolvimento recente.
Desenho/metodologia/abordagem: Analisamos o perfil das publicações internacionais sobre blended learning em gestão e negócios de 2001 a 2021. Identificamos quando, quem, onde e o quê foi publicado sobre o assunto, destacando os autores e periódicos de maior impacto com base no índice h e CiteScore (Scopus), além de explorar a cooperação entre países.
Resultados: O volume de pesquisas vem aumentando nos últimos vinte anos, embora existam poucos autores, instituições e periódicos de referência contribuindo para a consolidação do tema e os países que realizam mais pesquisas conjuntas em redes de coautoria respondem pelo maior volume de publicações, autores e revistas de impacto.
Pesquisa, implicações práticas e sociais: Sugerimos uma agenda de pesquisa futura e destacamos as contribuições feitas para a educação executiva e gerencial.
Originalidade/valor: Os resultados indicam que o número de publicações está crescendo, sendo a área de gestão e negócios a que mais contribui, sendo que os países que produzem em coautoria também fornecem mais publicações.

Palavras-chave: Educação gerencial, Educação executiva, Análise bibliométrica, Gestão e Educação Empresarial

MARCO DE GAMIFICACIÓN CON REFERENCIA A LA PERSPECTIVA EMPRESARIAL

RESUMEN
Propósito: El propósito de este manuscrito es desarrollar y presentar un marco de gamificación con ocho mecanismos de gamificación para el entorno empresarial y delinear cómo estos mecanismos son diferentes en el juego y en la empresa/lugar de trabajo considerando la gamificación como una aplicación de los juegos en contextos no lúdicos.
Marco teórico: La mecánica de la gamificación tiene ocho elementos marco: significado, logro, propiedad, escasez, empleo, influencia social, imprevisibilidad y evasión. Cada elemento del marco tiene 4 subelementos. Cada elemento del marco se ha descrito detalladamente en el lugar donde aparecen en el juego y en el lugar de trabajo, así como su relevancia.
Diseño/metodología/enfoque: El marco de mecánica de gamificación de ocho elementos se desarrolló teniendo en cuenta el negocio en la industria del comercio electrónico. Cada uno de los elementos del marco se diseccionó y desarrolló teniendo en cuenta el entorno empresarial/laboral en paralelo con el entorno del juego en contextos no lúdicos.
Resultados: El estudio dio como resultado el desarrollo de un marco de mecánica de gamificación para un entorno empresarial que puede aplicarse en cualquier entorno empresarial y laboral.
Investigación, implicaciones prácticas y sociales: El marco de mecánica de gamificación desarrollado puede utilizarse en cualquier entorno empresarial/lugar de trabajo para mejorar el rendimiento y aumentar el compromiso de los empleados. Sin embargo, hemos proporcionado una descripción detallada de cada elemento del marco de la mecánica de la gamificación. Los subelementos pueden variar de una organización a otra y de una empresa a otra. Antes de aplicar este marco, la organización debe revisar el marco junto con los objetivos empresariales de la organización y decidir el curso de acción.
Originalidad/valor: El estudio ofrece a las empresas y otras organizaciones la posibilidad de aplicar el marco de gamificación con ocho elementos para el crecimiento de la organización y el compromiso de los empleados.

Palabras clave: Aprendizaje Combinado, Educación para la Gestion, Educación Ejecutiva, Análisis Bibliométrico, Educación en Gestión y Negocios.

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INTRODUCTION

The gamification mechanics applying gaming design in a non-gaming context to solve the problems in the areas of business, education, research, defense and academics, but not limited to. Over a decade, the gamification techniques were successfully applied in the business industry and education to enhance teacher and employee engagement, motivating students (Prasad & Mruthyanjaya Rao 2021; Chapman & Rich 2018). Student and teacher engagement is one of the major concerns of academic institutions, and several researchers applied gamification techniques for enhancing teacher and student engagement in massive open online courses-MOOCS (Jose Bidara & Jose Coehlo, 2017). In the business environment, the use of gamification mechanics is a new phenomenon as generation Y is enthused by challenges and inclined to game environment to find solutions to the business environment which is new-age business perspective at present. Such types of new avenues and hypotheses in business approach leading to change in society, where the use and accepting gamification mechanics in non-gaming environments (Raftopoulos, 2014). In the recent past, several researchers published their success stories and ethical issues of gamification in the business environment demarking the differences in gamified and non-gamified environment, in areas like education, business, academics, hospitality, and medicine with enhanced levels of employee engagement (Robson et al., 2016; Persico et al., 2019). The badges, points, rewards, leadership boards are common game-based elements applied for employee engagement and motivation in business and workplace environment (Carolina Duncan, 2019). The appropriate gamification mechanics and successful application can improve the employee engagement and considerably reduced the disengagement from a whopping seventy percent (70%) to 20 percent (Prasad & Mruthyanjaya Rao, 2021, Filza Navid, 2020).

Team building, treasure hunts, group gamings with fun, quiz in group competitions considerably reduced employee disengagement and enhanced employee motivation and improved quality of work (Prasad, Mruthyanjaya Rao & Vaidya 2019; Prasad & Mruthyanjaya Rao; 2021). The gamification in non-gaming contexts provides a game logic to improve business productivity (Fischer, 2017). Application of gamification for consumer marketing via company websites, motiving the consumers with badges, points, and rewards that can be redeemed (Huotari & Hamari, 2017). Robson et al., (2016) successfully applied gamification to enhance customer and engagement of the employee and delineated different types of employees and customers who can act as 'players' in gamified environments. A gamified framework was developed to handle employee engagement in large organizations by offering challenges to the employees to dissect their talents and contribute thoughtfully to the

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organization irrespective of hierarchies and position (Hari Kumar & Satish Raghavendran, 2015). In a recent study, the authors thoroughly reviewed the application of gamification in changing the moods and behavior of employees applying appropriate gaming activities for motivation and to enhance employee engagement (Gupta & Gomati, 2017)

LITERATURE REVIEW

Gamification an emerging area has fascinated several researchers of various fields, such as education, research, business, academics, learning and education, and health care systems. However, the necessary theoretical foundation for gamification and application gamification mechanism was not attended to. Under gamified environment, the game-like characters are used in non-game contexts for employee motivation and enhance employee and organization performance. Treiblmaier et al., (2018) established a theoretical foundation of gamification comparing similar perceptions with other research areas. The authors also defined various domain scopes, and explicitly theorized the concept with an interdisciplinary group of proposed more relevant theories of gamification. Costa (2019) in his paper narrated the pedagogical values of gamification related to teaching an education perspective. The author further suggested elements and mechanics of gamification beyond points, leader board and rewards.

Gamification if applied correctly plays crucial role in organization's business strategies and will be the powerful motivating factor (Donato & Link, 2013). Several web-based marketing strategies are based on gamification which consists of points, leader boards and rewards. Gamification can be successful and productive even where the areas the performance declined drastically and definite need enhancement such as business organizations, health care systems and educational institutions (Fitz-Walter, 2011). Michael Ong (2013) studied the effect of gamification in perceptual diagnosis tasks for objectively measuring motivation and the study concluded that the gamification technique can be used in real-world for intrinsic motivation. Robert Songer & Kazunori Miyata (2014) addressed the issues related to gamification in the educational context with games and motivations, the relationship between play and games, gamified designs for optimal learning in on-game environments. The authors concluded the study by developing a model for the design and evaluation of playful experiences in learning systems stimulated by game design.

In the recent study immense benefits on the perfect application of gamification and resource pooling for optimal use of human and resources, enhancing employee efficiency and motivation reported by Prasad et al., (2019). Gupta & Gomati (2017) critically reviewed this nascent concept of gamification, theoretical development and literature and highlighted the

present applications of gamification and its role in employee motivation and enhanced employee engagement. Amon Rapp (2014) presented a SWOT analysis on gamification reviewing the frequently discussed topics and evaluated their strengths and weaknesses concerning gamification. The authors using a critical analysis outlined threats and opportunities concerning gamification. The authors aimed at working on developing strategy forecasting the future dissecting merits and demerits of gamification. This SWOT analysis also provided the limits and ethical issues in the application of gamification in the business environment. Bozkurt & Durak (2018) made a systematic review of the gamification referring to home Ludens identifying and paling the trends and patterns of gamification research. The review revealed that conceptual/descriptive articles outweigh other types of research papers with quantitative and qualitative papers showing an increasing trend. Lexical analysis indicated teaching, education, employee engagement, motivation, and behavior change, new gamification environment and most emerging concepts. Michael Hanus & Jesse Fox (2015) used a longitudinal study on parameters line intrinsic motivation, satisfaction, effort, social comparison to assess the effects of the gamified environment in the classroom and on academic performance. The study was conducted under gamified curriculum and without gamified curriculum. The authors concluded that the students with gamified curriculum showed less motivation, satisfaction, and decreased engagement. The authors suggested that utmost care be taken while designing the gamified environment and applying certain gamification mechanics in the learning and education domain.

STATEMENT OF THE PROBLEM AND RESEARCH GAP

After critically reviewing research articles and studies on gamification research, the author observed that most of the studies are concerned with education and learning, academics, employee engagement, motivation, and rewards. Most of the studies narrated how they applied the gamification concept in their respective studies and outcomes related to that particular study. No study has attempted to develop gamification mechanics framework and elements that can be used in business environment/workplace, and can be near one fit to all businesses and workplace. Bozkurt & Durak (2018) in their systematic review on gamification research concluded that the Framework appeared to be the most beneficial aspect in gamification studies. Therefore authors developed a gamification mechanics -- a framework for business perspective with focusing on the following objectives:

- Strategies managers can focus on methodology and strategies with mundane operations and logistical executions are moved away from the managers

- The proposed framework can standardize the processes, result delivery, with effectiveness and enhanced efficiency

- The strategic framework can be more attractive to retain the best talent and offer a progressive career path

- The framework can enable development of teams domain-specific with better skillsets with quality enhancement and task precision.

Why this framework?

- Enhance quality tremendously with optimal use of available resources

- Remove the mundane and repeated operations in the system

- The new framework and gamified environment will improve quality, quick delivery of results, and saves resources

GAMIFICATION MECHANICS AND FRAMEWORK – THEORETICAL BACKGROUND

The theoretical framework developed using the model based on Prasad and Mruthyanjaya Rao (2021), Prasad,et al., (2019) & Chou (2015). The gamification mechanics framework for business has eight framework elements -- Meaning, Accomplishment, Ownership, Scarcity, Empowerment, Social Influence, Unpredictability and Avoidance. Each framework element has four sub-elements based on their criterion. The elements are described in detail and delineated comparing the similarities between the game and gamified environment in business/workplace (Figure 1). The developed framework is beyond badges, points, leaderboard, and rewards can be applied in any business and workplace environments.

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Figure 1. Gamification framework with eight framework elements (Meaning, Accomplishment, Ownership, Scarcity, Empowerment, Social Influence, Unpredictabiloity and Avoidance)
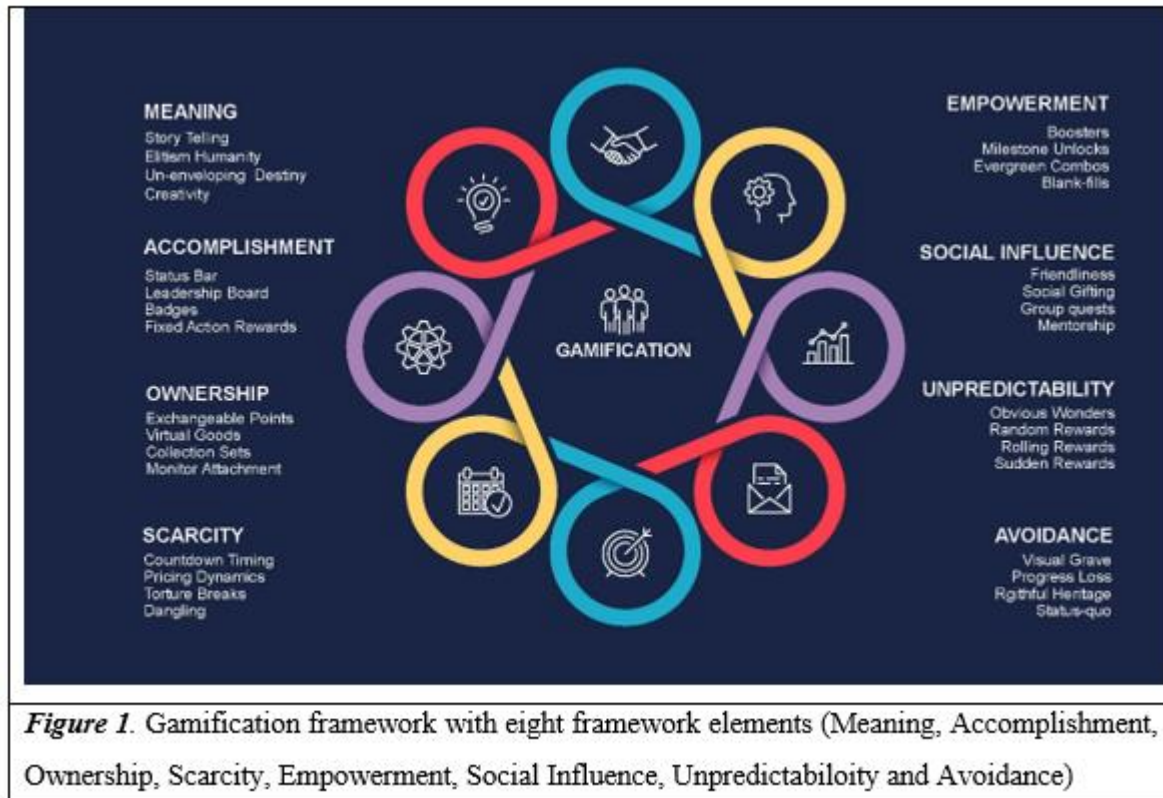
Gamification is much more than what it appears to be as the method creates innovative engagement models and motivating the employees to reach the set business goals beyond their capabilities. Though some people have the reservation on the term "gamification", one has to get its reality, for it shares common characteristics both at business and at the workplace, in particular. The authors attempted to draw a closer outlook for a better understanding of the gamification framework and its key elements delineating how they appear in a game and gamified environment at workplace/business. The conceptual framework of eight elements are presented here as under

Meaning

In the game, the meaning element is a concept of storytelling and unenveloping destiny (for example treasure hunt). The concept of this element can be applied in the business/workplace defining the scope work of a project – storytelling. The authors found it interesting while observing the gamification framework and learned how it applied to the business or workplace and how gamification ignites the minds towards finding appropriate solutions to the business problems. The sales & marketing team pitches in sales by demonstrating their products, explaining the use cases through story-telling to the Board, to the

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Investors, to the organization's opinion-makers. Similarly, in any game, the scope of work of any project covering the entire SLAs (service level agreements) and the extent of project and deliverables are explained through documentation un-enveloping the outcome or the result out of usage of such product service or solution. The authors observe that it requires a great amount of critical thinking assuming that what type of questions that they may be facing while presenting the product to a larger audience, how to answer those questions with meaningful use-cases or applications at different times, locations, demographics, etc. Our observation on this element is in line with the one proposed by Nacke & Deterding (2017) in their article "The maturing of gamification research."

Accomplishment

People getting motivated through earning badges, trophies, ribbons as a token of their achievement is not a new-fangled method. This is a common practice those visit famous website like Nike, Foursquare, where some of the potential customers on Leadership Board with high points. Namo App is another important phenomenon in the Indian polity where leadership boards are awarded based on activity points like Super Fan, Go-Getter etc. The only difference is in the entitlement of these to the people and how they earn these tokens of appreciation and the circumstances they receive. Many awards were being issued by the Military nearly a century ago. The awards' projection conferring on to the people for their accomplishments and the visibility has been changed. Now, every one of us in the organization could see the achievement in terms of the status bar, leadership boards, etc. The presentation, comparison, engagement, tracking of performance have been changed when competing with one another in achieving a similar task or a given task. So is the scale, at a time, in different geographical locations. With that, the scope and the competitive spirit have not only been with the parent group of people, but it spreads to and with the hosting and the third party nationals. For example, the badges conferred to the people for their merit in solving a common problem in an organization irrespective of the people working in a particular location. The customers also earn loyalty points or reward points for their frequent usage of specific flight services. These frequent flyers are preferred and given priority for early check-in with additional baggage and a particular lounge facility to enjoy the waiting period. Redemption of these reward points can be done throughout the world. This is possible with the advent of digitization and technology. In the business and workplace environment the Key Result Areas is weighed against its completion/outcome of an employee. This framework concept is in line with the results presented in the Social business transformation of Mann J (2013).

Social Influence

The virtual badges erase the boundaries between one region to another, and they display and announce the achievement louder and bigger through digital boards and badges attached to their digital profiles making the people feel proud of them. It not only in one particular business segment, or sector, or domain but applies to every field of business. A loyal customer can earn rewards. A continuous learner, who may be a student, earns the badges with a certain preference to the rest of the people of his/her age, thereby stays the first amongst the equals. An account holder at the Bank may get preference over others due to his/her regular payments of EMIs (Equated Monthly Installments), which elevates the status among the other customers. A customer who purchases through one outlet might get discount coupons whereas the others are to spend a bit more than him/her, which increases the loyalty towards the business outlet. The entitlements cause a significant influence on the others too and propel them to do more of whatever they do with the business entity, and thereby the engagement levels will be high that drives are achieving more revenue to the business. With connections to social media networks such as LinkedIn, Facebook, Twitter, Instagram, etc., the physical boundaries are blurred, and these started to scale of any size while sharing the recognitions and achievements with the peers. It is always fascinating for people to be treated with dignity and preference. Isn't it? This framework is in line with one proposed by Chou (2015).

Empowerment

How gamification can empower the people is the question to be analyzed. If one could examine the pattern of successful organizations of how they succeed, one of the key constructs for such success is decentralizing the system and making the people accountable for their performance. The leaders shall always guide, put timelines, and assist when their team is stuck in between but not interfere at every stage with micro-level supervision. Then only they become empowered, and the employees take responsibility. The sense of ownership enhances. When applied at the workplace, gamification mechanics improve the lives, increase innovative abilities, develop skills, and change the attitude, all these for a reason the team members get motivated by a self-driven approach to reach the goals phase-wise, similar to the milestones that have been set in a game. People who adopt the gamification approach and who gamifies the entire workflow will deliver the project or accomplish the tasks with ease. Van der Lubbe (2021) presented a similar framework on accountability and rewards

Unpredictability

When people undertake certain tasks or projects at the workplace, they are bound to face some unforeseen situations, especially when they work in a VUCA (Volatile, Uncertain, Complex, and Ambiguity) world. Every organization is tweaking its business models, style of functioning, dealing with unprecedented situations like the one we all live in during the Covid-19 pandemic. The most successful organizations are the firms that reduce the gaps between predictability and unpredictability. They should be able to predict the unpredictable to overcome the challenges that may pose. Gamifying teaches us this technique of facing sudden phenomena, the interim rewards for those who overcome the challenges effectively, making a reward system based on such successful attempts in finding better solutions. Chakraborty (2019) carried out a similar study under VUCA environment using gamified approach

Avoidance

At times, it is advisable to avoid certain situations, appear to be opportunities, not to try to grab everything that comes our way. There must be some thought to be developed or having towards relinquishing something to save the lives for the better targets. That's why it is said to look at the bigger picture. The authors have studied and observed that most successful organizations incur huge losses, but they take them up, keeping the long-term objectives in view. For example, car manufacturers calling back defective vehicles in batches from certain countries. Also, mobile manufacturers rolling back certain models due to perceived damage to the users/customers. Even if they do mean that they incur huge losses, they do call back, or else the brand itself will have vanished if they allow them to be in the market as the usage of those vehicles or devices will claim thousands of lives they may lead to causalities. Gamification outlived this a long time ago, and the concept of avoidance has been the crux to move forward to achieve/reach the ultimate goal. Freitas (2017) in his study reported the effects of avoidance in his study which are in line with our element narration

Scarcity

Gamification provides a framework, a mindset and a path of overcoming scarcity in terms of time, money that is, financial resources, workforce, land, machine, etc. It is similar to what a player has to handle the game to reach the goal or a phase within the given timeframe. The number of lives that it claims when the player does not complete the task or a particular level could represent the loss of employment or the project itself in a real scenario. Similarly, if an organization can deliver a project on time or at times before time, there is a likely chance

of getting rewards from the clients because it saves time and ensures customer satisfaction. If a project is being handled by a service provider claiming more time, more money, and more resources the efficiency of such a company shows the ability to handle the projects or the tasks. It has a direct impact on its service level. Therefore, it is always advisable to implement the best practices realizing the dynamics of gamification predicting the future repercussions on both the service provider organization and the client, especially, the authors observed that the service industry, hospitality, eCommerce, healthcare sectors experience the response from the users. The Strategic Direction (2020) of the emerald group narrated innovation scarcity and its effects on human behaviour, tortures which are more or less similar to our framework element.

Ownership

To be successful at business, workplace, and entrepreneurship, having a sense of great ownership is essential. The authors during the study found that wherever the people take the fullest responsibility, there is tremendous growth. It does not mean that the organization earns more profits. It earns the trust, and it earns the confidence of the end-users. That is significant. If you earn money but lose the game, do you think is it worth playing or being in the race? Whereas, if you earn trust and loyalty, the customers would be with the organization during difficult times. The authors studied a few cases in the eCommerce and Banking & Finance sector in this regard, proving the point. The organization may not be able to reward you directly in terms of enhancing the compensation, but it may give you certain stock options, offer stakes in the company, or issue some certificates/tokens that can be claimed based on your necessities. For example, issuing stock options worth Rs.10 lakhs to an employee who promises to stay with them for another five years; issuing an authorization for the employee to use the company's property as a residence or guest house as and when the employee visits certain tourist places across the world, etc., These act as stimuli for the employee to put in extra efforts and stay with the company for long. Employee stock exchange options are another type of motivating factors to retain the talent and employee product that he is part of the ownership (Mohini Varshneya 2021) and this element also similar to this study. The similarities between a game and a gamified environment presented in Figure 2.

Figure 2. Delineation of gamification framework elements between a game and a gamified environment at workplace/business

CONCLUSIONS

The developed gamification mechanics framework can be used in any business environment/workplace for performance improvement and enhancing employee engagement. We have provided a detailed description of each gamification mechanics framework element, however, further description of sub-elements are out of the scope of this paper. The sub-elements may vary from organization to organization and business to business. Before applying this framework the organization should review the framework along with the organization business goals and decide the course of action.

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