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Integrating Start-Up Companies Organizational Structure in a Business Intelligence Team Environment

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Integrating Start-Up Companies Organizational Structure in a Business Intelligence Team

Environment

By

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A professional paper submitted as the requirements for the

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INTEGRATING START-UP COMPANIES ORGANIZATIONAL STRUCTURE IN A BUSINESS INTELLIGENCE TEAM ENVIRONMENT

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Part One

Introduction

Business Intelligence (BI) teams and start-up companies have many similarities in how their organizations are structured. Although BI teams are part of a larger organization and their position in the bigger picture is different, start-ups have many features that if implemented correctly can significantly benefit the BI team's efficiency and productivity. This paper will investigate if this theory is applicable and will aim to design an organizational structure that will merge the benefits of the various views.

Statement of Problem

Business Intelligence teams, especially in a hospitality environment, have a very complex task to perform. They connect all of the information the property generates from the various departments. The main goal of the BI teams is to store and analyze this information and create value by producing helpful reports that help operations managers deliver on their job more profitably. Properties that utilize BI need employees with various skillsets and an understanding of the business processes in order to optimize efficiency. Generally, the BI team is split up and members work with their affiliated departments, which limits their opportunity to closely co-operate with each other and utilize the team's knowledge as a whole. The start-up culture has it in its veins to be able to co-operate and collaborate, as it is constantly battling for survival. A team can be most successful when members share their knowledge with each other and constructively build on each other's expertise creating an environment with positive synergy.

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Statement of Objective

The purpose of the paper is to add to the literature that discusses an optimal organizational structure for BI teams within and outside of the hospitality industry. The proposed structure will include the utilization of the strengths of the start-up companies and may be a starting point for further empirical or qualitative research on the comparison of the two organizational structures.

Justification

A well-structured BI team can heavily benefit the corporation in which it operates in as a whole. The current trends of utilizing big data for better financial results are becoming increasingly significant, but as always the organizational structure is a key factor to the success of these teams. Comparing start-up culture to BI teams is perhaps an unexpected feat, but the similarities of the two organizations seem too close to each other not to explore with a deeper research.

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Part 2

Literature Review

Business Intelligence in the hospitality industry is becoming increasingly relevant. The evolution of the information technology systems used by hospitality companies is helping industry professionals understand the data they gain from their customers. While data were always collected, and considered with high importance, due to the lack of the necessary tools, and knowledge, they were not available to be analyzed in much detail. Data, if used correctly, are able to provide competitive advantage against rival hotel companies. Therefore it is crucial to build a business intelligence team that is diverse and versatile in its skillset and have the necessary knowledge to continuously renew and update the existing IT and analytical infrastructure.

Start-up culture is a trending topic nowadays and it is gaining interest from researchers as well. Experimental studies are carried out in order to investigate what makes a company successful and what those key factors, which if implemented successfully, create the ever-desired competitive advantage for the entity.

Introduction

In order to have a clear understanding of whether the two organizational structures could be merged, the current states and conditions must be examined. In this section, the two structures and approaches are identified and their literature is reviewed.

First, the start-up approach and what contributes to its success is looked at in detail. The tasks entrepreneurs have to carry out, their relevance to the progress of the company, and their importance in its development are investigated.

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Secondly, the business intelligence team approach is explored; the different structures and their evolvments are inspected. Then business intelligence in hospitality is analyzed and how it currently operates within the larger organization is explored.

Start-up culture - Beginnings

In the beginnings, when starting a start-up company, the entrepreneur's number one goal is to have a clear vision of what he wants to achieve (Davidson, Grosso & Gunn, 2010). The importance of the goal is the same regardless of the market, or the industry the start-up plans to participate and operate in. The idea of the start-up is the first thing to be identified, since without an actual unique concept it is difficult to talk about a start-up company. The idea must be identified in the very early stages of the creation of the company and everything else will eventually build on these foundations the entrepreneur lays down for the company.

This vision must be clearly defined and identified in its surroundings and must make sense not only to the entrepreneur, but also to the team who helps in executing the plan that is to be developed for it (Hormozi, 2004). A clear definition of the idea is crucial for the company in order to get started. Many start-up companies fail right at the beginning, when they think they have an idea, but are not able, or willing to go deep into the details to explore its actual potential. Identification of the vision requires a certain degree of research that will allow the entrepreneur to make the first steps towards making a dream a reality. With the help of this early staged research the entrepreneur can pre-test the feasibility of the idea. The first hurdle of turning an idea into a company is at this stage and if the entrepreneur lacks the necessary skills to carry out this primary research the start-up's foundations will be based on shaky grounds.

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In any case the entrepreneur can heavily benefit from having a team around him/her (Wu, Wang, Tseng, & Wu, 2008). At a start, the entrepreneur generally asks his/her friends and family to comment and judge the idea, and the vision. Having and dealing with the team will become primary importance as the company grows. This paper will investigate what it is that makes a good team good.

The next task for the development of the start-up company is to become extremely familiar with all the details of the many different angles that support the idea being a valid business idea (Ries, 2011). The difference between this stage and the identification stage lies mainly in the level of details. When the entrepreneur studies his/her idea, he/she will carry out a due diligence process in order to understand how the idea will square off against similar ideas on the market. If the idea is so innovative that it cannot be placed into an existing market environment, comparisons with other similar ideas must be made. The idea must be validated against these other similar potentially competitive ideas in a measurable manner (Puriwat & Tripopsakul, 2013). All start-up companies evolve from a simple idea therefore the level of detail will be cardinal for the entire validation process.

Experimenting and testing the idea is what follows after the idea validation stage. If it is possible the groundwork for a business plan should be established at this stage too. The importance of a business plan cannot be ignored (Beagrie, 2007). Although many start-up founders question the relevance and significance of a business plan, when founding a business, it can be a tremendous help for the entrepreneur and would never be of disadvantage. Very often the business plan is neglected as it is not viewed with primary importance and naturally the development of the actual product or service is where the main focus is placed. However, with the help of a business plan the idea earns significant additional validation and support from

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various angles. The content of the plan includes all the research that was carried out at the early stages of the development and is necessary for the justification and proof of the idea. It also provides a significant written foundational document for the beginnings to the entrepreneur, the team, and the company as a whole. Additionally, the potential investors would also want to see a business plan that shows details and forecasts, and what the future is expected to be like for the start-up company (Beagrie, 2007).

After the research is done, the validation of the idea is essentially complete. If the idea still seems like something that could potentially result in financial success, then the “real” work will begin. The development of the product or service is of major importance when starting a company. Revenue will be generated by selling that particular product or service to customers. The experiment and testing of the actual product or service is what follows in order.

If it is something the start-up team with the lead of the entrepreneur can develop without going after additional financial resources the life of the start-up company will become just that much simpler. If funds need to be raised in order to develop the product/service then the research, the validation of the idea and the due diligence process becomes that much more important for the company (Atherton, 2012). Being able to prove a concept without an actual product or service is very difficult, however not impossible.

There are many different ways of going after financial investments for the start-up company. Various forms of private equity and venture capital are available (Amit, Zott, & Brander, 1997). Receiving funds from business competitions and government supports are all possible scenarios too. In each case the start-up company's owners will have to sacrifice something of value in their possession that could be a percentage of the company or some sort of collateral in exchange for the funds invested.

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If the funds are readily available for the execution of the product or service, the focus will be placed on its development and the proof of concept will eventually become a reality. While at the earlier stages the concept was challenged in theoretical scenarios this time the idea will be tested in reality (Kleyner, 2005). The product or service needs to be challenged by real customers and must be measured up against its counterparts in real life. After it is validated by real customers is when the actual sales can begin.

Start-up culture - Growth

During the entirety of the previously described steps a start-up company must be operating in a very lean structure. The explained progress of the start-up seems fairly simple when seen in writing; reality however is very different from what is envisioned on paper. In order to execute on all the plans of the company a smooth and efficiently operating company culture must be present and it has to be led by competent and dedicated leaders with all the team members on board having the same goals.

Most often when we talk about founding and creating a start-up we talk about an entrepreneur who is the origin behind everything. This person is the “Idea man” and usually the CEO as well; he or she will be the main drive behind the progression of the company (Wasserman, 2003). Sometimes a different person may be hired or someone with more experience is brought in as partner to manage and build up the company, but traditionally the “Idea man-CEOs” are the ones, who will be more successful, as their dedication and will to succeed is stronger than what any other experienced professional could have, simply due to the belief they have in their own ideas. Of course, success happens when opportunity meets preparation, so all other circumstances should be ideal too.

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It is very rare that the entrepreneur can do everything by himself. As Jim Collins says in his book *Good to Great* (2001, p. 41) “you have to have the right people on the bus” in order to achieve your goals. Having the right people mean that when you have a driver (CEO), who drives the bus (company) in one direction, all others on the bus must agree with that direction and should not distract the driver from following the track. Instead they should support him/her in some way that ultimately benefits everyone on the bus. If the drive is a long one (and it will be), the resources on the bus will be scarce so a very organized and balanced use of the resources must be developed in order to make it to the end. Each and every one of the passengers should contribute something and have a direct impact to the survival of the trip. Someone should know the map, another person should know the address, or be able to cook. Another should be knowledgeable about engines and tires etc. If the right group of people travel on the bus reaching the destination will be significantly more feasible.

A start-up company works just the same. When the “idea-man” gets on the bus and plans the drive he/she will know it will be a long trip therefore he/she has to make sure he/she has the right people to support him/her on the way. Depending on what the company is aiming to create, positions and organizational structure needs to be formed and established. A well-planned business will have a constantly growing team but it will always have to follow a strategic progression, where each team member is hired at the right time with the right purpose (Shelette Stewart, 2002).

Each company has its own way of growing, there is no such thing as perfect organization. Teams are made up of people and each person has a bag that stores their package (Purvanova, 2008). A package includes personality, skills, education, background, relationships, experience and many other things. When building a start-up each of these variables will count towards the

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success of the organization. In a start-up, positions and structure are not set in stone, so relationships and responsibilities will be elusive. By not having a concrete organizational structure, personal relationships will be much more relevant to the success of the business than the actual skillsets applied. The driver of the bus must be aware of all this so he/she will know when to slow or speed up the bus, or even completely stop it temporarily, if necessary.

A team can be most efficient and productive if it has positive synergy and works cohesively (Gaggiotti, 2012). What that means is that if the right people are selected to be on the team, they will each have their tasks and assignments to work on. Ideally they have the knowledge and experience to deliver on the expectations by themselves; however, if they cooperate with others they can achieve improved efficiency. Helping and supporting each other on the way is what makes $1+1=3$ in the right organizational environment. In a start-up company, because each member is selected for a specific skillset, it might be assumed that accomplishing this kind of synergy is not easily achievable, and that is indeed the case. The goal of the start-up company is one and only, which is making the company financially successful. Each member works hard to move the company to achieve that specific goal and adds their strengths to the equation to succeed (Gaggiotti, 2012). Everyone needs support and everyone needs motivation. Working alongside the others is supportive and creates positivity. Experiencing struggle together makes a team stronger and makes victory taste that much sweeter.

During the growth of the company each member of the team grows as an individual. Everyone will experience new things and learn new skills. As explained above, having positive synergy among the team members is very beneficial and experiencing challenges together in that kind of environment will result in learning new things together. Entrepreneurial learning is of central importance for an organization (Breslin & Jones, 2012). It stays within the boundaries of

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the company and benefits everyone who is involved. The synergic learning and growth is identified by Breslin and Jones (2012) as evolutionary approach, where the team evolves and grows together instead of each member growing independently from the others. Breslin & Jones (2012, p. 5) say:

“While a learning approach focuses its attention on the entrepreneur and individuals within the team, an evolutionary approach focuses on the development of these knowledge components.”

The team learns to attack problems, issues, or opportunities together and responds wiser and more prepared to each additional new challenge that comes around. There are no obstacles a good team cannot overcome.

Aside from learning, innovation is the other primary key for maintaining a competitive edge for an organization. Innovation cannot be overestimated in the life of a start-up. The foundations of the start-up were formed based on an innovative idea and it is crucial that imagination and inventiveness remain part of the nature of the organization. Pioneering in an area will always have benefits and being a step ahead of the competitors is very important for a start-up that lacks the essential material resources (Breslin & Jones, 2012).

Remaining innovative is vastly difficult. It is, however, the very best thing that can happen to a start-up and if the organization works cohesively, the team together looks into the future so progressive innovation will be generated.

Entrepreneurial behavior can be practiced in any kind of organizational context (Audretsch, 2012). Small companies, large companies, non-profits or associations can all benefit from this kind of behavior. In this study business intelligence teams are the ones we attempt to

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place this behavior and approach in, in order to accomplish better results than with the existing setup. The next section of the paper analyzes that kind of business environment.

Introduction to Business Intelligence

Business intelligence teams in corporations are created in order to offer data based solutions for problems the companies are facing (Duhon, 2002). Companies have been collecting this kind of information for a long time, but they were not able to process it as efficiently as they can during present times. The development of the technologies and the evolution of the tools allow business intelligence teams to analyze the information in much more detail and to provide solutions in a much faster way for the other teams with which they cooperate within the organization. In additionally to the problem solving and analysis support, these teams can offer solutions to optimize and speed up procedures that can help the companies they operate in to achieve better bottom-line results.

Companies collect information mainly about two major areas. The first such area is data about company procedures and operations with the primary purpose of reducing the expenses without losing out on the quality of the products or the services. With the help of organized and analyzed data, trends and inclinations can be identified and processes can be optimized to achieve better efficiency and higher productivity levels (Abai, 2006). By using data about the operations, weaknesses can be recognized and improved accomplishing less costs and higher functionality.

A data-driven organization is usually fairly lean in its structure. The utilization of the collected data allows the organization to really sharpen its functionality and become optimized in its culture. Many manufacturing and engineering companies advanced to the highest level

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applying such theories like Lean or the Sigma Six approach achieving almost perfect results with only a marginal error in their outcomes (Kokkranikal, Antony, Kosgi, & Losekoot, 2013).

Essentially these companies are at the top of the game in data-utilization, but other industries benefit heavily from following the principles of these concepts as well.

The other kind of information a company usually collects is customer data. As a general assumption, the more a company knows about its customers the better it can customize and alter its products or services for them (Green, 2012). By learning about customer data such as demographics, location, genre, culture, age, or marital status companies can decide whether the financial potential in the particular customer is valuable enough for being included in the target audiences. By profiling the customers, general calculations of their value can be determined so the marketing strategy can be built with more sophisticated and better identified goals. Customer valuation is primarily based on utilizing and applying the data the company collects from its operations and market research about its customers (Ellsworth, 2010).

Hospitality business intelligence

Business intelligence groups in the hospitality industry are not as common as in some other industries such as the previously mentioned manufacturing industries (Korte, Ariyachandra, & Frolick, 2013). Due to its nature in providing a service that is perishable and also very personal, data analytics are challenging to be used and applied. The number of guests and the amount of services sold to them are not always sufficient enough to be able to identify trends or errors. Also the variability of the service and the difference between guests behaviors are two very non-tangible types of variables of the guest experience, which if translated into numerical values might show high fluctuation in results. Optimization of procedures in the

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hospitality service industry therefore is a very challenging and less data driven exercise in regular size properties. In hotels such as the behemoths in Las Vegas or Macao the data utilization can be better applied as the amount of data available is more appropriate in size. These two markets are the ones, where business intelligence is most commonly used at the highest level in the hospitality industry and can result conclusions that then can be used for decision making and performance measurements.

The identification of the customers in the hospitality industry is very similar to the other industries so from these angles data utilization can be very helpful. Casino companies especially favor database marketing techniques with which they can precisely calculate players' values and based on that comps and other type of benefits can be given out as loyalty rewards (Fletcher, Wheeler, & Wright, 1992). Loyalty programs just like in other industries have become very common and they are always based on data metrics.

Business intelligence team as an organization

In the hospitality industry business intelligence is not a commonly used term, but we can identify certain areas of the organizational structure that would belong to this team or department. Generally speaking the roles that do any kind of analytical work could be considered business intelligence team members even though they often tend to be working separately from each other.

- Strategic planning is responsible for creating the budgets, forecasts and other forward looking projections that are necessary for the higher management and the investors to understand how the business is doing (Aldehayyat, Al Khattab, & Anchor, 2011).

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- Departmental analysts work directly with the departments and provide reports and data analytics to the management so they can plan ahead in a more structured better planned manner. Labor analysts purely focus on the performance of the employees and how it can be improved or better optimized (Davies, & Shafer, 2013). Marketing planning is mainly responsible for analyzing market and customer data and to utilize that for better creating the marketing strategy.
- Revenue management uses data perhaps the most directly in influencing operations by implementing the statistically generated data-driven directions for the sales department in pricing. Revenue management is essentially the most ideal output for utilizing all the available data and directly applying it for better results (Skugge, 2007).

These aforementioned roles sometimes work closely together, but often work independently and separately from each other. The performance quality of these positions is difficult to measure as aside from revenue management they play supporting roles and do not have a direct output of results that affect the bottom-line of the company. Some of them are purely informative to the supervisors they report to and do not tend to have a direct influence even though the value they have could potentially lead to higher revenues or reduced costs. As mentioned above hospitality industry provides intangible services, which should not be provided through “machine-like” means, however if data is applied with the help of BI tools, identified errors may be avoided in this industry too.

The other challenge business intelligence like roles have in the hospitality business is their independence from each other within their group department (Korte, Ariyachandra, & Frolick, 2013). Some companies like Caesars Entertainment have merged all their analytics teams and are working towards a holistic knowledge base, but others have their members work

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independently and the collected information and expertise is stored separately. A unified cooperating team in the business intelligence world is like in other departments very essential for optimized results.

Due to the various knowledge areas each analyst has on their particular field; each team member contributes from a different angle to the overall understanding of the group. By using the same kind of tools, but working on fairly different fields the team can understand what their fellow team members do and can learn the various sides of the business, ultimately helping each other to comprehend the big picture. By understanding the big picture business intelligence analysts can really optimize data based information and utilize it for the best possible reasons.

Ideally all data is directly implemented in order to have an effect on reduction of costs, delivering better quality product / service or achieving higher revenue. Revenue management is the particular field that has the most direct impact on the financial results (Skugge, 2007). By applying scientific projections to pricing the service sold to customers revenue management has an output, whose performance can be measured and identified.

The other areas of the BI team that use data could have a direct impact as well, which will benefit the company's bottom line in some way and in order to do that a cohesive organizational structure is necessary that is built on team work, diversity, knowledge and management.

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Part 3

Introduction

In this section of the paper, conclusions of the literature review will be made and a direct implementation of the start-up approach will be placed into the business intelligence environment. The details of these will be looked at and the theoretical contributions and negative effects will be weighted in order to learn whether the theory is implementable. Answers will be provided to why the start-up culture is the proposed way going forward and a recommended structure will be prepared for how the implementation should be made. Each area within the BI team will be broken down and discussed.

Four main concepts will be analyzed and the implementation of the theory will be divided into these four areas. These are: leadership, diversity, goal orientation, and development.

Leadership

In the start-up environment the entrepreneur is the leader, who puts together the strategy and sets the goals for the company. Although the leadership style of the entrepreneur is very important and contributes much to the success of the start-up company, in this study it is not analyzed. It does not fit into the scope of this study to compare the motivations and the leadership styles of the entrepreneur and a BI manager. Instead, the general duties and overall attitude towards the responsibilities is investigated and related.

In the business intelligence organization the leader is an assigned manager, who makes sure the team delivers results on an expected level of quality and is responsible to represent the group within the larger organization.

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From the literature review we learnt that an entrepreneur has to deal with many different factors of keeping the company moving forward and in order to do that, he/she has to be very organized and open-minded with the environment that surrounds him/her. Within a start-up organization everyone contributes to the same goal from different angles and the entrepreneur is the one who essentially strategizes and manages how to produce the best possible end result with what his/her team can realistically accomplish.

Start-up - Entrepreneur	Business Intelligence - Manager
Understands of business goals	Understands departmental goals
Knows team members' roles	Knows team members' expertise
Oversees operations	Understands company needs
Open-minded and willing to try things	Demand accuracy
Goal oriented	Focused on results
Self-motivated	Extrinsically motivated

Table 1 – Leadership

It is visible on Table 1 – Leadership that the two leaders have very similar tasks to perform and are responsible for a variety of things. Due to the differences between the organizations these responsibilities are slightly different; however a leader will always be reliable for the team and for the performance of the team.

The key skill in this category is the ability of keeping everyone continuously informed. The leader must make sure that everyone is aware what the rest of the team is doing so everyone is on pace with each other. It is crucial that the entrepreneur keeps the communication going on a constant base, as by itself it will very easily deteriorate and allow room for misunderstandings. In a BI team if the same sort of culture is implemented there will be need for a high level of communication between the leader and his/her team-members so everyone is on board with the main goals of the department. Additionally, he/she will work on improving the conversation among team members as well so the team grows together and nobody is left behind. A start-up is

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successful, when each of the employees learns about each other's strengths and are able to utilize those for the benefit of the company. The leader of business intelligence team must make sure he/she creates an environment, where although there is healthy competition among the members of the team they also help each other and complement each other's skills when a project requires that. If the members learn about each other's strengths then they will know who to go to when a specific problem occurs. Business intelligence teams have highly specialized members and their skill level is not the same in all areas. Utilizing everyone for their expertise is what an ideal team should pursuit, but that does not happen organically without the manager's influence and hard work.

Diversity

The teams, in both worlds, although in different ways, are very diverse. Naturally, the start-up company will have a more complex structure, since it is attempting to cover all areas of a business organization that include the operations of the company, selling and marketing the product or service as well as making sure the finances are stable and the numbers are all accounted for. In a business intelligence team many aspects of the operation are established and given by the department's position in the larger organization. Business intelligence is a specific team that focuses on a specific need of the company providing intelligence, which is collected from the various departments.

Business intelligence teams analyze departmental results that in a start-up company are usually done by individual members. Business intelligence teams can provide expertise to these teams, whereas in a start-up the resources are very scarce. Essentially, the data, which is

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collected from the individual departments like marketing or sales, comes to BI and can be analyzed independently, or examined collectively.

Table 2 – Diversity shows the difference between the two organizations:

Start-up	Business Intelligence
Various roles within operations	Various positions within department
Independent but rely heavily on each other's jobs	Independent supportive assignments
Scarce resources	Sophisticated tools
Complementing set of skills	Specific set of skills

Table 2 – Diversity

If the start-up approach is used the data will be investigated individually, but will be amalgamated in order to create a broader understanding of the company as a whole. Business intelligence has a strategic position in the larger organization since it knows and understands data in a way no other department does. If this knowledge is utilized and shared among the team members a very efficient and beneficial conclusion could be determined for the larger corporation.

The ownership of this knowledge is very much comparable to a start-up company's organizational knowledge, where due to the size of the company everyone's role is essentially strategic and each of the members is aware of how the business is doing. It is imperative for a start-up to be aware of all this information in order to be motivated and comfortable with the company's situation.

The uniqueness of both teams is their composition of the various skills each member has. These skillsets are cardinal for both organizations and benefit both with the diverse variety of

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knowledge. The teams are stronger, smarter and more skillful if the team members bring the different sort of experiences to the group.

The start-up approach in this category is essentially already implemented in the BI structure.

Goal orientation

Leaders in a start-up company make sure there is a healthy competition among the members of the team that contribute to the success of the company. Rewarding accomplishments in a small firm is always more difficult as the resources of the company are scarce in comparison to what larger companies can allow themselves. Nevertheless in both organizations there is need for acknowledgement of accomplishments and rewards.

In order to be able to give out justified rewards to the team members a measurable system needs to be developed, which in the case of the start-ups is mainly based on the amount of work and time they invest into the development of the company. Since each role and position is different, the comparison of employees can be challenging and that is the reason the acknowledgement is based on less quantifiable variables such as hard work and dedication. It may be quite subjective therefore the reward system needs to take that into consideration as well. In business intelligence teams acknowledgements are also difficult to give out in an objective manner. In regards of judging one's work it is much easier to identify, when the person does not perform on the required level than when he/she does something exceptionally well. Since the majority of the work is based on numbers it is fairly simple to realize when someone's work is not done correctly.

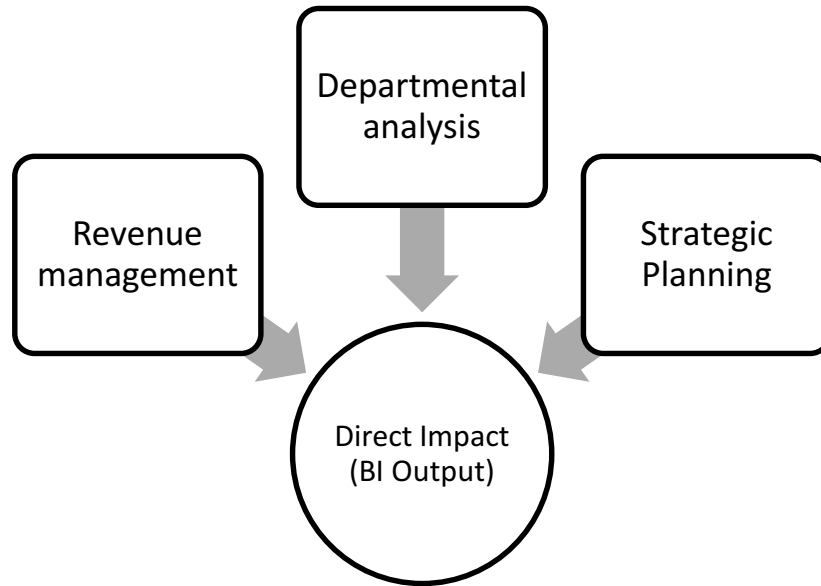
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What the business intelligence teams can learn from start-ups is that each and every one of the members of the start-up company has a direct output to the operations. Sales person sells; marketing person works on the brand and finance person makes sure the accounts are right. Each of these people contributes to the success of the goal, which is to make the company successful. Although BI members provide valuable information to the various departments they work with, that information is not necessarily utilized the way it could be if BI had a stronger saying in what will be implemented in operations. The most direct output that comes from BI is done through revenue management, which controls inventory of the rooms the hotel is selling and decides about prices, based on analytical results. Utilizing revenue management heavily benefits the company's bottom line and is a direct proof that BI can significantly add to the profitability of the company.

Ultimately, if the start-up approach is to be implemented in the BI world all of the analysts who work within the department should have contribution to the kind of output revenue management delivers. This would mean that the department has one overall goal over everything and that is to utilize the knowledge for a more analytically designed operation. By doing this more departments would benefit from the econometrical and statistical decision makings and more optimized financial results could be achieved.

In practice, the three areas identified as business intelligence could all come together and work on their end result. The graph below represents this cooperation and how it will appear in operations.

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Graph 1 – Business Intelligence output

Development

Finally, development of the team needs to be discussed. Effectively, we learnt from the literature review that growing as a team and developing together is more favorable for the company than if the individual members grew independently from each other. With the help of the previously explained features successful start-up companies have a very strong cohesive team, which helps them deliver on their goals.

Evolutionary Learning	Individual learning
Team and company grows together	Individual member grows
Holistic knowledge base	Independent knowledge
Group experience	Personal experience
Team effort	Seperate experience
Team support	Lack of team support

Table 3 – Development

Business intelligence teams often have the problems of having a high employee turnover as the skills that are employed at these teams are scarce and allow the team members the ability

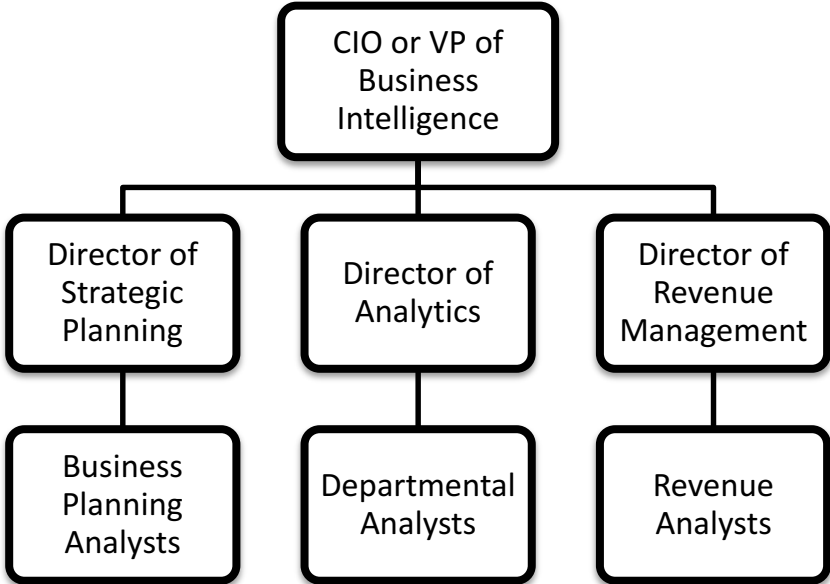
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to move up on the organizational ladder fairly quickly. Nevertheless, if the team could be kept together it would heavily benefit the organization as a whole. If the start-up approach is implemented and the team develops together the leader / manager could significantly be better in strategizing with the team and help the larger corporation to more financially sound results.

Conclusion

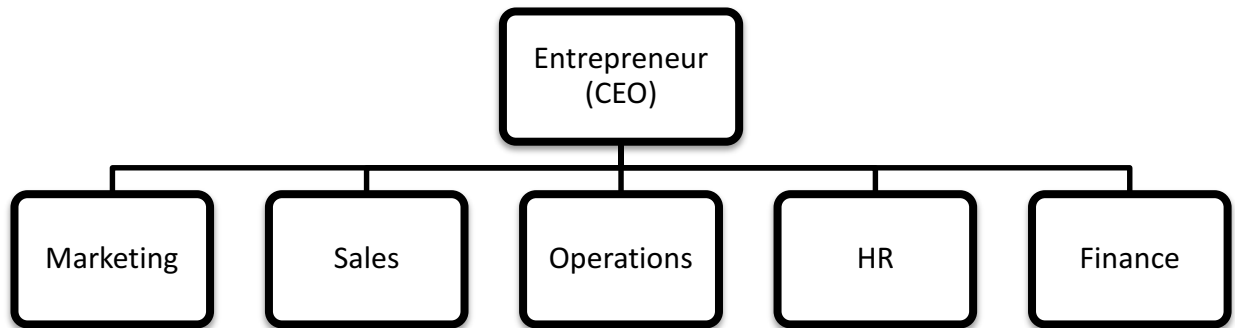
Overall, it appears that utilizing the start-up approach in the business intelligence environment can be suggestively beneficial for the organization. From all angles the ideas of a successful start-up can support the goals of the BI teams and considerably increase the power and output they can achieve. The key factors to achieve success seem to match in both worlds and the same sort of variables impact the productivity and efficiency of both organizations.

The recommended organizational structure would allow all analytical work to be done under the same umbrella (Graph 2). This is similar to the way the entrepreneur manages the start-up company (Graph 3).



Graph 2 – Recommended BI Organizational Structure

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Graph 3 – Start-up Organizational Structure

Limitations

Leaders are important for both teams and during this study we considered the personal qualities not relevant as that impact the results from a very different angle. For the purpose of the study the research was carried out assuming all these factors were given to be at a normal level, so they are not independent variables for the results.

Managerial implications and implementation strategies

The purpose of the study was to theorize about the possibility of merging two quite different kind of organizational approaches and create a more efficient and more productive solution for the business intelligence teams. Although it was done for an academic purpose due to the nature of the study the implications can be suggestively applied to real world practices and be implemented in BI teams in a realistic way.

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The most important aspect of carrying out the implementation seems to be to bring the teams together so each member has an understanding and a professional working relationship with one another. Having all the team members at one physical location would certainly make this transition easier for the employees, where they could interact with each other and have human moments together instead of the electronic communication that has become trendy recently.

Selecting a strong leader is certainly key for success, but since in this study this area was not investigated, this particular detail is assumed to be a given. Nevertheless, by having the business intelligence team working towards a unified output the team leader of BI may differ from what is generally used in operations. The leader could be coming from the revenue management side, but could also be from the finance or planning departments or even the CIO could be considered as a leader, although the investigation of the IT department was outside of the scope of this study.

The kind of atmosphere that would benefit the BI team and is implemented in the start-up world is fully up to the leader and will have to be accomplished by him / her with the help of the team members.

Barriers of implementation

The implementation of an organizational change is always a challenge in a larger operation. Aside from the legal and human resource issues, finding the leader, who owns the necessary knowledge of all merged departments, can be a difficult.

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Final thoughts

In summary, start-up culture is a trendy topic nowadays and it is for a good reason. With the help of this study a unique comparison was made and resulted in some interesting conclusions that can benefit the subject, which in this case was the business intelligence department. It is possible that the start-up approach could be implemented in other parts of the larger organization, but that research will have to be carried out separately, utilizing the findings this study achieved.

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