A REVIEW OF THE IMPACTS OF HOUSTON POPULATION OVERGROWTHS AND LACK OF EFFECTIVE TRANSPORTATION SCALABLE TECHNOLOGY & SUPPORT FOR ORGANIZATIONAL LEARNING

[1]**DR. WAWA NGENGE,** [2]**DR. ANGELA BRANCH-VITAL,** [3]**DR. CATHERINE W. KISAVI-ATATAH & **[4]**DR. PARK E. ATATAH**

[1]*Ph.D. Program Chair School of Business/Houston Campus School of Advanced Studies (SAS), University of Phoenix, Phoenix, AZ, USA*
[2]*Ph.D. Associate Professor, Departmental Head, Prairie View A&M University, Prairie View, TX, USA*
[3]*Ph.D., Adjunct Professor, Prairie View A&M University, Prairie View, TX, USA*
[4]*Ph.D., Associate Professor, School of Advanced Studies (SAS), University of Phoenix, Phoenix, AZ, USA*

ABSTRACT

When dealing with effective, efficient, and proficient scalable technological developments and the learning processes certain applications should and must be carefully initiated, developed, implemented and followed step-by-step. However, Houston Harris County, Texas and the surrounding areas have failed the residents due to their leaderships' inabilities, incapacities, and incapacities to address the overgrowth of the populations in the past 10 plus years and the implications that came with it. This study used Double-Loop Learning (DLL) process and Deutero-Learning (DL) process theories as lens of analyses. This quantitative research study investigated the populations' overgrowths in Houston Harris County; Texas for the past five years; and the traffics jams issues associated with the growths. The second quantitative research study will investigate populations' overgrowths in Houston Harris, Texas for the past ten years and its flooding effects on Houstonians. The implications of this quantitative scalable technological developments and supports for organizational learning process should eventually bring some possible positive social changes to many Houstonians in Houston Harris County, Texas and the surrounding areas.

Key Words: Scalable, Technology, Supports, Organizational Learning, Populations' overgrowths, Traffics jams, flooding, sustainability, double-loop learning (DLL), and Duetero Learning (DL).

INTRODUCTION

Houston Harris County, Texas is the fourth largest city in United States of America (USA); and it is arguable that Houston will possibly surpass Chicago, Illinois as the third largest city in the United States (US), due to its continued and progressive population growths. For example, for the past five plus years, Houston, Texas has been one of the fastest growing cities in the US; possibly, due to the interests of energies employees, employments, companies, or the openness of Texas and local leaderships "open invitations arms" approaches. Sometimes, low or near zero taxes incentives was used as attaché to motivate investors to Houston Harris County, Texas among other factors to mention a few. As result of these types of approaches, it is necessary to immediately implement effective, efficient, and proficient scalable technology and support for organizational learning processes for the city to continue to positively grow within its current complications, implications, and complexities. Beside the above, driving in Houston Harris County, Texas and possibly in the surrounding counties is a nightmare due to lack of effective public policy and leadership support for organizational learning processes. Hagel (2009) found that more and more organizations have realized that in order to be successful in any highly competitive environment, they must encourage double-loop and deuteron educational learning processes. Technically, the double-loop learning (DLL) and deuteron learning (DL) process is designed to plan for today and tomorrow; and singularly for only the present and it can be effective on a short run. As such, the implications of not becoming a learning organization can be costly. It appears that Houston is in for a bumpy and costly transportation ride; because Houston has no mass transits system as the population overgrows. Therefore, the focus of this educational learning quantitative research study is to quantify Houston Harris County population over growth for the past five years; quantify the traffic jammed implications the population growth brought with it, and to provide educational methodologies such as DLL and DL on how to symmetrical and systematically enhance the implementations of effective, efficient, and proficient scalable technologies and the supports for organizational learning approaches.

GENERAL HISTORICAL BACKGROUND AND THEORETICAL FRAMEWORKS

In relationship to scalability of any technological developments and the supports of any organizational learning process, it is argued that for any organization to be successful, the organization should and must adhere to certain types of organizational learning processes (see Hubel, 1991; Grantham, 1993). The summed that for any organizations to be successful, they should and must find ways to implement three proven types such as;

1. **Single-Loop Learning (SLL)**
2. **Double-Loop Learning (DLL), and**

3. Deutero-Learning type (DL).

By definition and implementation, the **Single-Loop Learning** process is designed for organizations to identify errors as they occur and correct them immediately or systematically by developing current policies goals and objectives (see Dodgson, 1993; Fiol & Lyles, 1985; Senge, 1990; Mason, 1993). From a holistic viewpoint, Dodgson stressed that SLL "can be equated to activities that add to the knowledge-base or firm-specific competencies or routines without altering the fundamental nature of the organization's activities" (p. 375). This simply means that SLL are designed to symmetrically and systematically address any organization goals and objectives with immediately overhauling the purpose of the organizational existence.

It should be noted that however important SLL maybe when dealing with Scalable Technology & Support for Organizational Learning process, it appears that the City of Houston Harris County, Texas did not effectively, efficiently, or even proficiently implement these suggestions as the populations' growths increases. This practically fell against the historic dynamics of workable and scalable SLL principles. In fact, it has been argued that "SLL has also been referred to as lower-level learning" (p. 803) process (Fiol & Lyles, 1985). While contrarily, it is arguable that it is an adaptive learning or coping by Senge (1990), and non-strategic learning by Mason (1993). As debatable as it maybe, SLL has been successfully implemented for years and it appears it is lacking in Houston Harris County, Texas in addressing its populations' growth in relationship to its current traffics jams in the major highways and beyond hence this topic was selected to be reviewed, identify its problems, and assessed its possible applications that could bring some positive social changes to all Houstonians.

Secondly, by definition and implementation, the **Double-Loop Learning** process is designed for organizations to the "detection and correction of errors, the organization is involved in the questioning and modification of existing norms, procedures, policies, and objectives. DLL involves changing the organization's knowledge-base or firm-specific competencies or routines" (p. 375). This means in a DLL appears to be doubled folded because it identifies and correct errors as they come; get the whole organizations involved with the process, and changes organizations' knowledge-based or firm-specific competencies or routine. It further means that a symmetrical and systematical multi-dimensions are approached collectively. Additionally, Fiol and Lyles (1985) believed that DLL is "also called higher-level learning" they furthermore believed that DLL expands organizations' capacities, capabilities, and abilities to become effective, efficient, and proficient in the final analysis. Senge (1990) on the other hand, argued that DLL is a strategic learning process; while Mason defined a strategic learning "the process by which an organization makes sense of its environment in ways that broaden the range of objectives it can pursue or the range of resources and actions available to it for processing these

objectives" (1993, p. 843). In order words, the goals and objectives of the stakeholders, the people in general, and the environments should and must be met for the DLL to be effective and efficient across the board.

Therefore, the lessons learned and insights gained from reviewing DLL are fundamental and it appears to be a way to proficiently scale any organizational growths and how to make some changes as needed immediately or thereafter. However, this is lacking with Houston Harris County, Texas when dealing with populations' overgrowths and the development of mass transportations methodologies. This is the assumption, perception, and presumption because as the population grew, there were no proficient, effective or efficient ways to positively develop needed transportations' methodologies or even scale the degrees of growths versus the implications associated with traffics jams and that was why this topic was selected. Furthermore, this goes against the principles and objectives of the Scalable Technology and Support for Organizational Learning process. For instance, scalability by general agreeable or disagreeable understanding is to develop and implement marginal propensities to positively or negatively identify growths or decreases associate with any technological development. This is missing in Houston Harris County, Texas. Furthermore, the possible lack of supports for organizational learning processes is yet another missing link yet this topic was selected in this study.

Finally, Deutero-Learning (DL) usually occurs whenever organizations learn the proper ways to carry out single-Loop learning (SLL) and double-Loop learning processes collectively and periodically. When dealing with using DL as a learning tool, it is argued that the first two forms of learning process will not occur if the organization is not aware that learning should take place. For example, Nevis et al. (1995) affirmed that awareness of ignorance motivates learning. Nevis et al. stressed that "identify seven different learning styles and ten different facilitating factors that influence learning. For example, one of the facilitating factors is identifying the performance gap between targeted outcomes and actual performance…" (p. 1). Additionally, they emphasized that one of the ways in identifying the performances' gaps between targeted outcomes and actual performances which appeared to be missing in Houston Harris County, Texas for possibly the past ten plus years as its population grew.

Houston Harris County, Texas leaderships failed to notice the gaps in targeted outcomes and actual performances of the major highways as well as the visible complications and implications as the population overgrew. The leadership attitudes fell perfectly under the ideology of DL because Argyris and Schon (1978) and Argyris (1994) suggested that "This awareness makes the organization recognize that learning needs to occur and that the appropriate environment and processes need to be created. This also means recognizing the fact that lengthy periods of positive feedback or good communication can block learning…" (p. 1). As sad as it maybe,

Houston Harris County, Texas leaderships knowingly or unknowingly failed or refused to address the incoming populations' growths dilemmas or they collectively lacked the identifications of the marginal propensities of the organizational supports for scalable technological developments. As such, **DLL and DL** were selected to be used as the lens of analyses of data in this educational learning process quantitative research study. Additionally, as summed by Zuboff (1988), Nevis et al. (1995), and Nevis (1994);

> **Double-loop and deutero learning** are concerned with the why and how to change the organization while single-loop learning is concerned with accepting change without questioning underlying assumptions and core beliefs. Dodgson states that the type of organizational learning also depends on where in the organization learning occurs. Thus, learning can occur in different functions of the organization such as research, development, design, engineering, manufacturing, marketing, administration, and sales. (pp. 84-85)

These reasons among others, was why these educational learning processes were selected as lens of analyses of this quantitative educational learning research study.

LITERATURE REVIEW

Evidence has shown that scalable technology and support for organizational learning is a must and it should be continually implemented as the environment changes. That is not the case with Houston Harris County Texas because the leaderships in these areas did not see coming. For example, for the past 30 plus years' elections, Houstonians have voted public train mass transits transportation systems down due to some unknown reasons and objectives. As Houstonians continue to vote against any effective public transportation methodologies, the city continued to grow and the ability to efficiently or proficiently implement such policies is possibly too late and maybe costly due to lack of future outlooks for scalable technologies and lack of supports for organizational learning processes. For example, Grantham (1993) states such costs could include loss of market share, loss of competitive edge, loss of intangibles such as reputation and the ability to attract only the best and brightest minds. This is possibly where Houston is today because as the population growths become compacted and more complicated, it is harder to build high frequency transportation methodologies or approaches on top of people who are not ready to relocate for whatever reasons. Based on these experiences with Houston Texas, it is advisable that planning for the future outlooks, instead of procrastinating for unknown is a must when dealing with the ability, capacity, and capability to sustain any changes in scalable technologies and support for the organizational learning processes.

As asserted by Atatah and Kisavi-Atatah (2015);

> There is no doubt that the roads' conditions in Houston Harris County, Texas along with the surrounding areas and counties are currently in deplorable conditions. The deteriorations associated with the "roads state of minds" are unimaginable in all fields. First, endless statistics has shown that Houston Harris County, Texas leads the nation in fatal driving while intoxicated (DWI) accidents. Houston Harris County, Texas has also led the way in commercial vehicle accidents since 2009 till date according to Olsen (2014) [1], investigative report in Houston Chronicles. In addition, it should be noted that majority of the commercial vehicles' accidents are attributed to the overnight booms of oilfield related businesses along with natural gas associated with hydraulic fracking operations (Schneider, 2014) [2]. (p. 101)

This means the over population of the city of Houston Harris County, Texas for the past five plus years has created unmanageable situation due to ineffective, inefficient, and possibly in proficient scalable technologies and organizational learning approaches. As the population grows, Houstonians somehow find ways to overcome the associated defaults as the city leaderships scramble on how to systematically overcome it. However, coming it without any future outlooks sustainable methodologies is easier say than done. Furthermore, as an aged Houston adage says, "Houston we have a problem." The question now becomes, how do we resolve the congestions of roads and high ways associated with the overpopulation in Houston Harris County, Texas by implementing workable and sustainable methodologies without breaking the bank? That is the focus of this quantitative educational research study.

Additionally, Atatah and Kisavi-Atatah (2015) study found that the implications of population overcrowding in Houston Harris County, has created other problems for Houstonians beside the above mention. For example, in 2015, they found that the population overcrowding of Houston Harris County, Texas created increased and congested road traffics; additional road accidents, and more interestingly increased road traffics' deaths between 2010 and 2013 and possibly beyond. Therefore, the implications associated with population overcrowding without any sustainable workable methodologies, cannot and must not be overemphasized at any rate. However, the pains and discomfort associated with these overwhelming outcomes have become a matter of everyday life experiences for many Houstonians with no solutions. As such, the focus of this quantitative educational study is to analyze the recent population increases in Houston Harris County, Texas between 2011 and 2015; as well as to quantify the associative/correlations dread traffic implications and how to fundamentally implement some sustainable and scalable immediate, short-term, midterm and long-term solutions.

Scalable technologies and supports of organizational learning process is obviously used in many agencies and organizations as to stay on top of predictable and unpredictable occurrences. For example, Zeng et al. (2013) conducted an organization community partner Health Net (CPH) on how proficient, effective, and efficiently share information with Health-Center-Controlled Networks (HCCNs) community health centers (CHC) and rural health clinics (RHC). This study looked into all 16 member organizations of (CHC & RHC) in CPH which were non-profit health care organization which provided primary health care to underserved population. The primary goals of this study was to examine the effectiveness of the scalable technologies which were designed for these health care organization to improve their services to the underserved populations. The study found that while these new implemented scalable technologies were effective, it is left for the individual organizations to make them more workable and dependable. In other words, the study found that no matter how good any new technologies maybe, it is the willingness of the individual organizations to use them proficiently. Finally, the study summed that that the holistic descriptions of the environment, discussions of the collaborations within the "six original individual CHCs to create CPH, the EHR and Data Warehouse projects at CPH, and then explains CPH's on-going operations and new challenges in the context of meaningful use and big data movement" (p. 45). These findings posed certain limitations as addressed below when dealing with specified scalable technologies and organizational learning process applications.

In fact, while this primary goals of the study were to implement scalable technologies on organizations learning process, it had certain limitations. First, this study did not address how to initiate, develop, and implement a structural public policies, organizational, and leaderships' applications; such as the populations' overgrowths we currently faced in Houston Harris County, Texas. Additionally, the study did not address how to proficiently overcome the traffics dreadlocks we currently faced in Houston Harris County, Texas. As to mention a few, the study did not address how to systematically scale and project future Houston Harris County populations' growth developments and how to plan and implement scalable applications. Above all, the study did not address a scalable technologies and organization learning processes which could eventually benefit many Houstonians; and that is the focus of the scalable technologies and supports for organizational educational learning study.

When it comes to the continuity of any technological development and existence of previously developed and implemented technologies, certain factors should be addressed and revamped (Casalini, Fipretti, & Pyka (2016). They believed that as to distribute or redistribute any type of technologies into any existing organizations with a centralized control, a holistic redesign maybe be needed and possibly majority of the existing industries may need to be completely reconstructed as to meet the new technological applications. Regardless, Casalini et al.

(2016) affirmed that "…a technology and a design philosophy that, albeit superior to centralized control…" (p. 1). They argued that such new technologies may survive so long are playful ideology and the technology of foolishness is implemented. In this case study, they reported that if small firms develop and report novel marketing niche, it enhances their ability for them to survive old and new technological development even though the truth behind their successfulness maybe subject to unconfirmed debates. They concluded that technological ideology is the key factor that determine the success or failure of any organization possibilities. Or, the technologies of foolishness as assumed by James March may help for such organizations to survive new designs and developments. Basically, this study examine some of the critical factors on how to positively survive new or current technological development. This maybe what the organizational leaderships need to acquire as sustain the populations' overcrowding in Houston Harris County, Texas and surrounding areas. Above all, this city and surrounding areas did not address the proactive ways to sustain scalable technology and a support of organizational learning process which is the primary focus of this study.

When dealing with ways to identify scalable technological developments and organizational supports approaches, Busch, Barzel, and Leuders (2015) explored how to develop scalable continued technological developments in students' academic achievements. The primary goal was to develop student achievement in a formative ways that deal with crucial skill for planning carrying out effective mathematics learning lessons. This study followed three evidence-based design principles which were "Continuous Professional Development (CPD) unit has been designed for a statewide official in-service teacher program of the Ministry for Education in Baden-Württemberg, Germany" (p. 53). The study found that of the 26 investigated pilot study which involved repeated administrated workshops; the teachers show a significant statistical differences in participants' diagnostic competencies in their before and after the training. The study suggests that further investigations/explorations need to be performed on a large scale basis other than the outcomes of the pilot study. However, this study did not investigate the roles of populations' growths and their implications on technological developments such as mass transportations transits systems; which is the primary focus of this study.

Additionally, Venkitachalam and Willmott (2015) investigated ways to factors shaping organizational dynamics in strategic knowledge management in Knowledge management research and practices. They found that for any learning process to be successful, different dimensions approaches should and must be implemented and repeatedly revisited as to positive scale its effective for the future. This study did not address the impacts of populations' growths in any environments; which is the primary focus of the study. Studies upon studies have been reviewed and the appeared to be profound limitations and gaps in literatures hence this study should be supported as to eventually bring some positive social changes to many Houstonians and surrounding residents

(see Well, Uplekar, & Pai 2015; Rathi, Given, & Forcier, 2016; Kantabutra, 2014; Luciano et al. 2015; Potworowski, & Green, 2016 Greenhalgh et al. (2016). The reviewed literatures came with certain limitations and gaps which were addressed below.

LIMITATIONS AND GAPS IN LITERATURE

There is no doubt that effectively scale any immediate or preexisting technologies and organizational supports learning can be challenging. However, it comes with certain pros and cons because none was identical when dealing with the quantifications or even the qualifications of technological developments talk less of the organizational supports learning processes. And that is the case in this study. First, the similarities with the literatures reviewed as compared to the proposed quantitative research study showed they dealt with three major factors which were immediate or preexisting technological developments, effective or ineffective organizational supports learning processes and the immediate or delayed costs of inactivates on the hands of leaderships. On the other side, the limitations or gaps in reviewed literatures showed that they did not address populations' overgrowths; they did not address the immediate or delayed complications, associated compartments, and short, midterm, or long-term implications. Furthermore, they did not address the traffics jammed issues Houston Harris County, Texas are previously and currently facing as the implications due to lack of technological developments and lack of organizational supports learning processes specifically in these areas. Also, these studies did not provide any effective, efficient, or proficient ways to resolve these implications faced by many Houstonians and the residents in the surrounding areas. Above all, they did not provide any scalable working tips on ways to financially resolve or even ways to sell these drawbacks to the stakeholders of Houston Harris County, Texas and the surrounding areas which is the primary focus of this quantitative research learning process study. These limitations and gaps posed some fundamental research questions (RQs) to investigate in this study.

METHODOLOGY

In any research study, the design and the selected applicable methodology is critical in obtaining effective, efficient, and proficient results, findings and accurate interpretations of findings and this study is not alone as compared to the above analysis. As such, this study will implement a quantitative methodology dealing with possible already existing secondary data in populations' growths for the past five years and the numbers of cars on the major highways on a daily basis especially on Mondays to Fridays monthly. As contended by Atatah and Kisavi-Atatah in 2015;

Houston Harris County, Texas and surrounding areas by using Non-Experimental Descriptive Statistics measurements design concentrating on Houston data between 2010 and 2013. Non-Experimental Descriptive study statistically examines or secondary data and makes some social scientific senses out of the outcomes of data analyses (see Creswell, 2009; [8] Frankfort-Nachmias & Nachmias, 2000 [9]). (p. 103)

This among other reasons was why this quantitative methodology was selected in this learning research study.

RESEARCH QUESTIONS

There are three major quantitative research questions (RQs) this proposed research study intends to investigate. The first two RQs deal with collecting scalable quantitative workable data; and the last RQ deals with scalable quantitative learning designs processes.

RQ 1: What are the quantified scalable numbers of Houston Harris County populations' growths for the past five years?

RQ 2: What are the quantified scalable numbers of traffic jam in Houston Harris County, Texas for the past five years?

RQ3: What are the quantified scalable working designs when dealing with technological developments and supports of organizational learning processes?

A comprehensive analysis of these RQs should assist us on how to possibly find some scalable technological developments and selling them to the supports or Houstonians organizational learning processes.

However in recent memory, **Hurricane Harvey** visited Houston Harris County, Texas and surrounding counties and cities between August 24 and 28, 2017. Basically speaking, Hurricane Harvey was yet another **symmetrical quagmire** for Houston Harris County, Texas public policies makers should find workable but scalable environmental technologies on how to effectively, efficiently, and proficiently positively sustain the repeated overwhelming flooding in Houston, Texas. For example, Hurricane Harvey was known to visit Houston Harris County, Texas and surrounding areas at least week prior to its visitation. Yet, there were no visible sustainable public policy environmental efforts on how to contain Harvey's visitation other than the applications of **old and outdated approaches.** These approaches include but not limited to "***Please, stay at home; and stay away from the roads as Harvey visits.***" "***Please, buy some sustainable nonperishable goods to humanistic support you and your families for at least 5 days as Harvey passes by.***" "***If you note "first respondent" please, do not go to work***

or the streets." These are good examples of some aged and outdated ineffective, inefficient, and in proficient approaches that have failed Houston, Texas for years. Contrary to public policies decision-makers' expectations, Hurricane Harvey won negatively. Hurricane Harvey singularly **dropped approximately 52" of rain in Houston Harris County, Texas alone.** Also, the surrounding **counties and cities averaged between 45" to 50" of rain across the board. It should be noted that these numbers could account for annual rainfall numbers and not for 3 to 5 days as documented recently.** The aged and outdated drainage approaches failed the citizens as a result of lack of scalable technological developments to contain the flooding. It is estimated that Hurricane Harvey stands as possibly one of the most expensive hurricane in US history at $200 billion dollars in damages. Above all, the physical, mental, physiological, psychological, injuries, and deaths effects of Hurricane Harvey cannot and must not be undermined. Therefore, **Hurricane Harvey proved that insanity comes in different ways** because Houston Harris County, Texas public policy-makers have relied on previously proven failed policies to sustain flooding repeatedly such as Hurricane Harvey among others; and the results were and are holistically the same across the board and that is a classical definition of insanity as psychologists classified.

As such, this study will investigate 2 major research questions (RQs) in its scalability study 2 in the following ways.

RQ1. What are the quantified scalable technological developments to sustain flooding efforts in Houston Harris County, Texas for the past 10 years?

RQ2. What are the quantified scalable workable flooding designs when dealing with technological developments and supports of organizational learning processes?

STAKEHOLDERS ANALYSIS

It is noticeable that these costs grow exponentially in large global organizations that generate a lot of data and need to find ways to learn lessons from their own data and assimilate and adapt to a complex regulatory environment to stay ahead of the competition. Whining dealing with costs, inactivity is the enemy of progress when selecting the stakeholders of any programs. Above all, when dealing with a topic as complex as what we have in our hands, stakeholders' analysis is relatively complex. For example, many Houstonians dread any time they have scheduled or unscheduled appointments to drive through any Houston Harris County highways. Therefore, the stakeholders of the learning study comprises of the employees, customers, leaderships of all associative organizations and regulations in and around Houston Harris County, Texas to make it work. It should be noted that designing any program's success stays in the hands of the future to come; and the future to come is

time sensitive which usually determine who the effective stakeholders will be and that is the case in this learning study.

CONCLUSION AND DISCUSSION

In conclusion, this quantitative research provides an indication of dynamics of recent thinking in the field of student learning and educational strategy. This is the case because the lessons learned and insights gained are always critical in solving or even scaling any immediate or future lingering problems. For example, for more than ten plus years, Houston Harris County, Texas and surrounding areas have procrastinated on finding the effective ways to resolve the implications and complications in the highways which were created by its populations' overgrowths. Over and over again, ineffective, inefficient, and even in proficient applications have been implemented with no success. The roads such as **Hwy 59, Hwy 69, I-10, and I-45** among other to mention a few were endlessly expanded and the problems of traffics jams still plague Houstonians and their surrounding residents. This showed that Houston falls completely under the lack of using scalable technological developments and organizational learning process for the past 10 years plus based on the reviewed literatures. As popular astronauts' historic saying goes, "**Houston we have a problem**." And, yes indeed we do. Secondly, according to **Late Nights Show Johnny Carson** argued in the past during his hosting, "**My show is like I-45 in Houston, Texas which you can start the construction; but, it never ends**" (personal communication). In fact, that still Houston possibly after twenty-something years later. **Furthermore, the repeated overwhelming flooding in Houston Harris, Texas and surrounding areas speaks for itself.** However, in light of these implications associated with Houston Harris County, Texas populations' overgrowths and the associative traffics jams and repeated flooding, if the proposed quantitative research studies' findings are effectively, efficiently, and proficiently develop and implemented, many **Houstonians and surrounding residents should see and experience some positive social changes in no time.**

.

REFERENCES

1. Atatah, P.E. and Kisavi-Atatah, C.W. (2015). The Impacts of Oilfield-Related Booms and the Overall Safeties Implications in Houston Harris County, Texas and Surrounding Areas! *Open Journal of Social Sciences*, **3**, 100-117. http://dx.doi.org/10.4236/jss.2015.312011

2. Argyris, C. (1994). Good communication that blocks learning. *Harvard Business Review,* July-August: 77-85.

3. Argyris, C., & Schon, D.A. (1978). *Organizational learning: A theory of action perspective.* Reading, MA: Addison-Wesley.

4. Busch, J., Barzel, B., & Leuders., T. (2015). Promoting Secondary Teachers' Diagnostic Competence with Respect to Functions: Development of a Scalable Unit. ZDM: *The International Journal on Mathematics Education,* 03/2015, Volume 47, Issue 1

5. Casalini, A., Fioretti, G., Pyka, A. (2016). Playfulness, ideology and the technology of foolishness in the creation of a novel market niche for distributed control: The... *Journal of Organization Design,* 12/2016, Volume 5, Issue 1.

6. Creswell, J.W. (2009) Research Design: Qualitative, Quantitative, and Mixed Methods Approach. 3rd Edition, Sage Publications, Inc., Thousand Oaks.

7. Dodgson, M. (1993). Organizational learning: A review of some literatures. *Organization Studies,* 14/3: 375-394.

8. Frankfort-Nachmias, C. and Nachmias, D. (2000; 2008) Research Methods in the Social Sciences. 6th Edition, Wadsworth, New York.

9. Huber, G.P. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science, 2*/1:88-115.

10. Kantabutra., S. (2014). Measuring corporate sustainability: a Thai approach. *Measuring Business Excellence,* 05/2014, Volume 18, Issue 2. DOI: 10.1108/MBE-02-2013-0015

11. Grantham, C.E., with Nichols, L.D. (1993). *The digital workplace: Designing groupware platforms.* New York: Van Nostrand Reinhold.

12. Greenhalgh et al. (2016). SCALS: a fourth-generation study of assisted living technologies in their organizational, social, political and... BMJ open, 2016, Volume 6, Issue 2, DOI: 10.1136/bmjopen-2015-010208

13. Luciano et al. (2015). Organizational Gameplay: The Player as Designer of Character Organizations. *International Journal of Computer Games Technology,* 01/2015, Volume 2015.

14. Mason, R.M. (1993). Strategic information systems: Use of information technology in a learning organization. *Proceedings of the Twenty-Sixth Hawaii International Conference on System Sciences '93, CA: IEEE Press,* 840-849.

15. Nevis, E. C., DiBella, A. J., & Gould, J. M. (1995). Understanding Organizations as Learning Systems. *Sloan Management Review, Winter:* 73-85.

16. Olsen, L. (2014). Oilpatch Traffic—and Rogue Trucks—Boost Death Toll. Lise Olsen, Investigative Reporter, *Houston Chronicle, 13 September 2014.*

17. Potworowski, G., & Green, L., A. (2016). Training Change Agents in CTA to Bring Health Care Transformation to Scale: The Case of Primary Care Practice...*Journal of Cognitive Engineering and Decision Making,* 12/2016, Volume 10, Issue 4. DOI: 10.1177/1555343416657237

18. Rathi, D., Given, L. M., Forcier., E. (2016). Knowledge needs in the non-profit sector: an evidence-based model of organizational practices. *Journal of Knowledge Management,* 02/2016, Volume 20, Issue 1

19. Schneider, A. (2014). *Deadly Accidents Involving Trucks Tied to Fracking Operations Surge.* Andrew Schneider, 15 September 2014.

20. Senge, P.M. (1990). The leader's new work: Building learning organizations. *Sloan Management Review, Fall:* 7-23.

21. Venkitachalam, K., & Willmott, H. (2015). Factors shaping organizational dynamics in strategic knowledge management. *Knowledge Management Research & Practice,* 08/2015, Volume 13, Issue 3.

22. Wells, W. A., Uplekar, M., Pai., M. (2015). Achieving Systemic and Scalable Private Sector Engagement in Tuberculosis Care and Prevention in Asia. PLoS Med... *Public Library of Science 12*(6), 1549-1676

23. Zeng et al. (2013). Using Electronic Health Records and Data Warehouse Collaboratively in Community Health Centers. *Journal of Cases on Information Technology (JCIT),* 10/2013, Volume 15, Issue 4

24. Zuboff, S. (1988). *In the age of the smart machine.* New York: Basic Books.