REVAMPING HIGHER EDUCATION: UNLEASHING THE POWER OF JOHN KOTTER'S EIGHT-STEP CHANGE MODEL FOR ENHANCED PERFORMANCE

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Abstract

Change management is a major discipline for introducing and implementing change in higher education institutes. Kotter's eight step model institutionalizes change in desired areas of higher education institutes. Main objective of this study was to explore the uses of Kotter's change management model and to empirically determine the effects of adopting this model on academic and administrative performances of higher education institutes. Three largest public sector universities were taken as target population. Sample is comprised of one hundred respondents include departmental heads, directors and top administrative officers working in Higher Educational Institutes. Closed ended questionnaire was prepared using seven points Likert Scale, sixteen items for Kotter's eight step change model and eight items for performance of higher education institutes were adopted from relevant studies undertaken in past. Data was analyzed using structured equation modeling technique on SMART PLS-3. Construct validity and composite reliability used to measure validity and reliability in the data, Standardized Root Mean Square Residual (SRMR) and Normed Fit Index (NFI) were used to measure model fitness, R Sqaured was known to see magnitude change of predictors on explained variable, Variance Inflation Factor (VIF) was used to measure correlation among predictors and discriminant validity using Fornell Larcker criterion and Heterotrait-Monotrait ratio were used to measure the chances of multicollinearity in the constructs. Using all tools of analysis, results were significant and all alternate hypotheses were accepted. Study concluded that Kotters' eight step model of change has significant effects on academic and administrative performances of higher education institutes. This research is pragmatic in nature and provides valuable insight for top management of educational institutes to systemize and implement change for improving performance in effective manner.

Key Words: Change Management, Kotter's eight step model, Performance, Freeze, Unfreeze, Higher Education Institutes, Smart PLS

INTRODUCTION:

In the third decade of twenty first century, businesses are going through complex and dynamic environment characterized by mega changes; digital transformation and ever increasing customer expectations (Lotfi,2021). Main drivers of adopting change and running businesses efficiently are technical information' (the know-how) and capacity building of human resources to cope with changes and challenges (Oliviana,2010). More dominant challenges have been influencing higher

education institutes are globalization and involvement of government in funding policy as well as latest assessment trends as a result of new audit cultures marginalize institutes to cope with

challenges in a vigorous and vibrant manner. These challenges directly affect management and

governance of Higher Education Institutes (Caberal & Heut, 2011).

Change Management is a planned tool for incorporating change in organizations and changeover institues from current state to desired future state. The main actors in planning and implementing change are managers working at leadership positions who must keep employees at readiness stage to respond change accordingly (Ali & Hasan, 2022). The way business adopts and manages change, as discussed by (Hennayake, 2017), mainly depends on nature and type of business as well as human capital. (Kimhi & Oliel, 2019) further elaborated that effective strategy is pivotal for initiating and implementing change that should be formulated considering current situation of enterprise as well as managerial style doctrined by corporation. It is hard to track down uninterrupted changes in technology and customer needs therefore persistent efforts of top management and employees essentially needed to be futuristic and working seamless in direction of change (Jaradet, et al 2013).

Higher Education institutes fuel up knowledge based economy by producing skilled human capital, enabling youth to meet their social needs as well as driving force of socio-economic development of the country(Ali, et al.,2018). The main objective of Higher Education Institutes is to develop youth of the country by providing quality education, raising awareness and transmitting their intellectual gains to boost economy of the country (NEP, 2009). Higher Education Institutes are engaged in process of exploring, creating and sharing new knowledge through effective research functioning as institutes have scientific approach of observing and disseminating knowledge with their well-equipped labs (Marginson, 2004). Higher Education Institutes also help country to face global challenges by providing research based empirical facts and figures which will help the country to find best solutions of all national and international issues. These Institutes give pragmatic solutions of contemporary problems which will surely reinvigorate lost image of the country in the world (Ali & Tahir, 2009).

Problem Statement

In last two decades it has been observed that higher education institutes have been surrounded by multiple challenges; inadequate funding, increasing globalization and expansion of knowledge which force the governance of universities to set themselves up for being adaptable to continuous change in educational institutes (Newby, 2003). Astonishing fact observed in Higher Education institutes is their restrictive organizational culture which is challenging for management in form of interdepartmental barriers and ineffective communication. Therefore it is dire need of introducing new processes and methods which overcome barriers to change and enable institutes to implement change in desired manner and improve overall performance (Vaira, 2004). The organizational culture comprised of set rules and regulations, as discussed by (Allen, 2003), become a potential source of organizational conflict in paperwork for initiating and implementing change. Ultimately desired change is interrupted and mismanaged by following set of rules and regulations (Bureaucracy) which cause below average performance of Higher Education Institutes in national and global recognition of achieving benchmark in imparting quality education and producing research output (Vaira, 2004). It is therefore pertinent to mention that distinctiveness of governance and innovative culture of autonomy coupled with academic freedom must be practiced via effective change processes which can reinvigorate higher education institutes change effort that leads to improve performance and elevate ranking of institute in list of top performing academic institutes of the country (Gornitzka, 1999). The guidelines given by Jhon Kotter in his model of change highlights the systematic and smooth process for identifying the need for change and implementing it accordingly which will not only result success in bringing desired change but improves performance of higher education institutes in the manner as envisioned in vision and mission statements.

Research Objectives:

The main objectives of this study are to;



- 1. Explore the uses of Jhon Kotter model of change in Higher Education Institutes.
- 2. Analyze the effects of using Jhon Kotter's eight steps change model on performance of Higher Education Institutes.

LITERATURE REVIEW

Change Management:

Change is inherent in global business environment as discussed by (Hashim, 2013), in the eve of technological, cultural, economic changes as well as rapid changes in customer needs and expectations, organizations cannot sustain without incorporating change. (Lawal et al.,2014) defined change management as the process of continuous change in organization's structure, culture, direction and capabilities. For adequate implementation, change must be effective and sustainable. Change has to be aligned with developing and communicating the vision, developing change ownership, as discussed by (Pollack, 2017), as well as engaging the top leadership in effective implementation of change. (D'Souza, 2008) discussed change management is a method for eliminating resistance to change particularly during the phase of implementation, it is group of tools, processes and techniques for people-side of change. Exploring the internal and factors of change, (Jalagat, 2016) described internal factors of change include; merger and amalgamation, structural changes, technological and initiatives taken for growth and development however external factors also influence changes include; political, economic, cultural and environmental changes.

Models for Change Management

Kurt Lewin Model for Change Management:

Lewin, a social psychologist, introduced three steps model of change management in the year 1947 (Husnain et al., 2018). Three stages are labeled as; unfreeze, change and Refreeze.

Unfreeze: At the first stage, managers take sincere efforts to capture attention of employees for communicating necessity of change through meetings, discussions and counseling. Employees will not only receive messages and participate in meetings but they will also self-experience climate of change in organizational culture (Husnain et al., 2018).

Moving: At the second stage, employees actively participate in change and managers engage them in the task of change. Positive change is expected in feelings, thoughts and behaviors of employees, as their minds opened up, they would be motivated enough to take new responsibilities. Managers must listen concerns of each employee individually and help them to understand benefits and future prospects of change. More responsible managers will attempt to overcome all kinds of fear and anxiety in employees, occurred as a result of change, which make them more confident to accomplish assigned goals in effective manner (Husnain et al, 2018).

Refreezing: At the third stage manager has to develop Performance indicators as well as monitor the performance as per suggested standards. Employees work under control systems and they expect reward based on their efforts or new behavior. Managers at this stage stabilize the change environment by confirming employees' effective participation and verifying the change is implemented as per set goals (Husnain et al., 2018).

Jhon Kotter Eight Step Change Model

Jhon Kotter, a professor at Harvard Business School, well recognized in global leadership for change management, recommend eight steps change model for managers who want change to be implemented in true spirit. The eight step change model explained below;

Create a sense of urgency: Managers must initiate change by declaring statement in the current set up of organization which must draw attention of main stakeholders towards sensitivity of the issue. The declaring statement must exhibit facts related to contemporary business environment which require organization to change its mission and drive towards direction of change. When managers show factual information of relevant industry they can expedite change because employees' once understand sense of urgency, they will get themselves ready for change (Kotter, 1996).

1996).

Create the guiding coalition: After becoming successful in creating sense of urgency the next step for a leader is to develop capable, experienced and influential allies to be part of change management team. Identifying committed team members is of utmost importance at this stage because they will become main actors in the transition of change implementation phase. In addition, willingness of team members should be acquired too, if members join team by orders of their superiors then effectiveness of change process will be a question mark for top management. Therefore leaders are advised to be democratic and effective in creating a guiding coalition so each member of coalition will be cognitively aligned with goals of change in the corporation (Kotter,

Develop a change vision and strategy: At the third stage, leaders and guiding coalition should develop the organization in picture of unforeseen destinations where organizations will get on peak of success as result of introducing and implementing change. The change vision should be realistic based on achievable targets and measuring success in relevant industry, if it doesn't seem in future what is projected today, it will be hard for leaders to sustain commitment of employees with the change effort. Therefore leaders must maintain a balance between change vision and organizational effort of guiding coalition which will be a win win strategy (Kotter, 1996).

Communicate the change vision: Leader and coalition team will convey context and meaning of change vision in hearts and minds of all managers and employees in the organization who will get affected by change. The effective message should be repeated in different formats via different channels of direct and indirect communication and circulated among rest of employees, wherever available, which will create organizational buy-in idea of change. Once the message is effectively communicated, majority of the employees or members will not only welcome change but want to see it happen as soon as possible (Kotter, 1996).

Empower Broad Based Action: This stage is mainly characterized by the words; putting wheels of change in motion. Leader and coalition team, at this stage, will be consistently working with the rest of the organization for changing existing workflow and organizational patterns of hierarchy in management flow. Once the team become more effective in empowering desirable action, chances for resistance to change will become minimized (Kotter, 1996).

Generate Short-Term Wins: Coalition team along with its Leader attempt to show visible short term wins for sustaining effort towards long run change. Because long run goals will take more time that can cause frustration and discontentment in employees who were motivated for change and cannot wait for long times. Coalition team must correlate short-term wins with change effort, this can only be possible when long term goals are broken down in short term gains by showing employees the current milestones achieved in the long run journey towards destination of change (Kotter, 1996).

Consolidate gains and implement more change: At the seventh step of change, leader with his coalition team proceeds further in the direction of change by removing old practices, barriers in internal processes or any form of resistance derived from past events and people work in the organization. Looking back on short term wins correlated with effort of change, leader and members of coalition team combat resistance to change and overcome all barriers coming in the way to implement more change. Main hurdles highlighted as internal processes, inter-departmental connections and systematic flow of traditional practices which need to be revamped in implementing more change (Kotter, 1996).

Anchor change in the culture: Initiatives need to be taken at eighth stage to change values, reward systems, Human Resources' activities, norms and attitudes and work systems in a way by which these changes should be aligned with new direction or change vision of the organization. As leader with his coalition team become effective in implementing change at all levels and departments, culture of change is developed and the organizational effort towards change ended here (Kotter, 1996).

Kotter's change model in Higher Education Institutes

Kotter's change model application has empirically been studied in higher education institutes but it is generally associated with administrative and technological changes. (Wentworth et al., 2018)

endorsed using Kotter's model to change teaching performance appraisal system in higher education institutes. Researchers correlated steps of change with internal assessment procedures of the faculty members. They clearly explained teachers about new contents and procedures of assessment as well as motivated them enough that new appraisal methods will not only satisfy them but also help them in timely promotion, reward them accordingly and give them timely feedback. (Guzmán, et al., 2011) also evaluated kotter's change model successful implementation in dental education related to student assessments and incentive designs for faculty involved in clinical outcomes. They rolled out new systems with pilot implementation, main purpose was gaining trust of faculty involved in changes to dental education. (Calegari, et al., 2015) believed Kotter's change model was useful for faculty involved in Accreditation program of a renowned business school.

Research Hypotheses

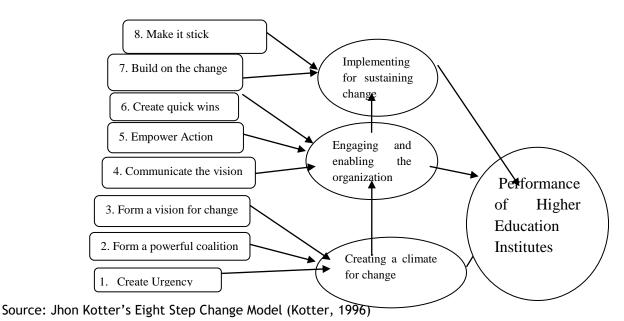
Considering discussion in literature review, Following Jhon Kotter's three factors, Eight Step Model for change, alternate hypotheses are developed as;

H1: Three steps of first factor, 'creating a climate for change' positively and significantly affects' performance of Higher Education Institutes.

H2: Three steps of second factor, 'Engaging and Enabling the Organization' positively and significantly affects' performance of Higher Education Institutes.

H3: Three Steps of third factor, 'Implementing for sustaining change' positively and significantly affects performance of Higher Education Institutes.

Conceptual Framework



METHODOLOGY

Nature of Research

This research is quantitative in nature, as (Bryman, 2015) discussed quantitative research as process of collecting and analyzing numerical data as well as finding the causal inferences of research problem. This research determines the effect of jhon Kotter's eight step model of change on performance of Higher Education Institutes located in Jamshoro city, Pakistan.

Data Collection Instrument

This research includes collecting primary data through closed ended questionnaire. Richesin (2011) used survey questionnaire to measure the effects of implementing Jhon Kotter's model of change on Non-governmental organizations. Closed ended questionnaire as discussed by (Bryman, 2015) is list of questions comprised of multiple choice options for respondents. Survey research is conducted by structured interview or questionnaire (Bryman, 2015). Closed ended questionnaire in a proposed

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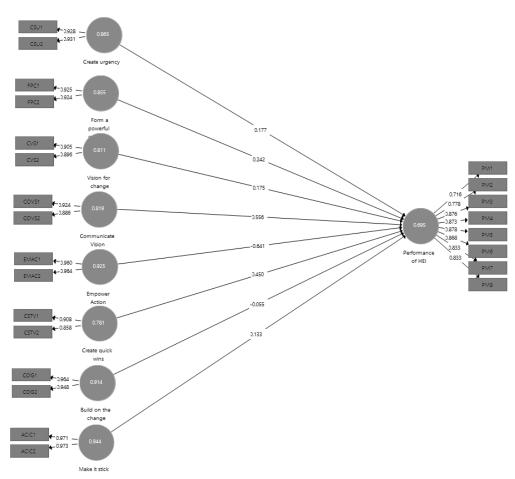
research includes sixteen items of Kotter's eight step change model adopted from (Richesin, 2011) and eight items on performance of Higher Education Institutes adopted from (Kaur & Singla, 2019). Closed ended questionnaire has twenty four (24) items and is developed using seven points Likert Scale. Bryman (2015) discussed seven points likert scale usually comprised of seven levels of agreement/disagreement.

Population and Sample

This research includes three prominent public sector universities located in Jamshoro city, Pakistan. Liaqat university of Medical and Health Sciences, Sindh University Jamshoro and Mehran University of Engineering and Technology. There are two hundred nine (209) Directors, Deans and Departmental Heads, out of which one hundred questionnaires finalized as sample size. Forty questionnaires were distributed in Sindh University however thirty each in Mehran University and Liaqat medical university jamshoro.

RESULTS

Structured Equation Modeling:



(Figure 1)

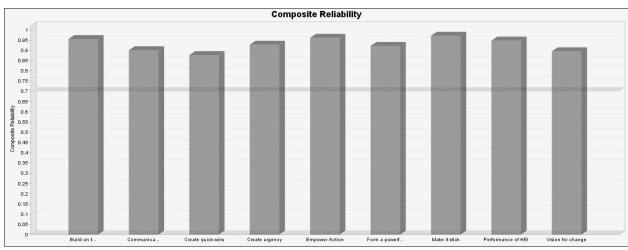
Average Variance Extracted (Construct Validity)

Figure 1 shows construct validity of items or factors which are highly loaded with their respected variables. Data is supposed to be considered valid, if its average variance extracted value is >.50 (Bryman, 2015). First variable, Create urgency, Average Variance is 0.86>0.50, Second, Form a Powerful coalition, Average variance is 0.85>0.50, Third, Vision for change, Average Variance is 0.81>0.50, Forth, Communicate Vision, Average Variance is 0.819>0.50, Fifth, Empower Action, Average Variance is 0.92>0.50, Sixth, Create quick wins, Average Variance is 0.781>0.50, Seventh,

Build on the change, Average Variance is 0.91>0.50, Eighth, Make it stick, Average Variance is

Build on the change, Average Variance is 0.91>0.50, Eighth, Make it stick, Average Variance is 0.94>0.50. Likewise Average variance of dependent variable i-e Performance of Higher Education Institutes is 0.69>0.50.All values show significant validity in the data. Construct validity results assured items of each independent as well as dependent variable are correlated with their respected variables or constructs. Therefore above data is said to have significant construct validity.

Composite Reliability:



(Figure 2)

Figure 2 show composite reliability of each variable with its items. Reliability refers whether the observed data show consistency in responses of each question or not. If Alpha value >0.70, internal consistency is acceptable and data is reliable (Bryman, 2015). In above figure all the values of eight independent variables and one dependent variable are > 70. Therefore internal consistency is excellent and data is reliable.

Model Fitness Standardized Root Mean Square Residual (SRMS), Normed Fit Index (NFI) and R Squared using SEM Analysis:

Fit Summary	Saturated Model	Estimated Model
Standardized Root Mean Square	0.078	0.078
Residual SRMR)		
Normed Fit Index (NFI)	0.930	0.930
R Square: 0.771		

(Table 1)

Standardized Root Mean Square Residual as the difference between observed correlation and model implied correlation matrix. Its acceptable value is <0.10 or 0.08. (Stone, 2021) In Table 1, using SEM analysis, the SRMR value is 0.078<0.08, so the observed model is best fit. Normed Fit Index also known as Bentler and Bonnet Index computes the chi square value of the proposed model then compares the same value against a benchmark. If NRI estimated value is >0.90, model is considered as best fit (Bentler & Bonnet, 1980). In above table, NFI value is 0.930>0.9, so the model is best fit. R squared measure variation in the dependent variable caused by independent variables. R square below 0.50 indicates poor effect and greater than five show moderate effect, however values >70 reflect significant effect on dependent variable (Bryman, 2015). In table 1, R Squared value is 0.771 indicates 77% change or improvement in performance of Higher Education institutes explained by adopting and implementing Jhon Kotter's eight step model of change.

Variance Inflation Factor (Multicollinearity Analysis)

Variance inflation factor attempts to measure collinearity among predictors in the research model. High VIF increases variances in estimated regression coefficients because of multicollinearity among independent variables. VIF>1 and <5 indicates moderate correlation which is less harmful for the fitness of the model however >5 reflects high collinearity (Murray et al, 2012).

S.No	Predictors	Performance of HEI				
1	Create a sense of urgency.	1.777				
2	Form a Powerful coalition.	2.220				
3	Create a Vision.	3.131				
4	Communicate the vision.	3.520				
5	Empower Action.	6.499				
6	Create Short-term wins.	5.485				
7	Consolidate gains.	2.705				
8	Anchor change in the culture.	2.597				

(Table 2)

Table 2 show results of multicollinearity analysis, Predictor 1, VIF value is 1.77<5, moderately correlated, Predictor 2, VIF value is 2.20<5, moderately correlated, Predictor 3, VIF value is 3.13<5 moderately correlated, likewise Predictors 4,7 & 8 VIF values are <5 show moderate correlation. However, Predictors 5 and 6, VIF Value 6.499>5 and 5.485>5 respectively, show high correlation which can create problem in model fitness.

Discriminant Validity Analysis

(Hamid et al, 2017) discussed that discriminant validity attempts to measure the constructs empirically differing from one another. Most important criterions are Fornell Larcker and Heterotrait- Monotrait ratio.

Construct	CSU	FPC	CVS	COVS	EMAC	CSTV	COG	ACIC
CSU	0.804							
FPC	0.676	0.786						
CVS	0.691	0.644	0.818					
COVS	0.598	0.579	0.655	0.686				
EMAC	0.612	0.668	0.513	0.545	0.698			
CSTV	0.711	0.669	0.765	0.620	0.655	0.785		
COG	0.611	0.680	0.707	0.669	0.552	0.731	0.751	
ACIC	0.651	0.617	0.672	0.563	0.577	0.660	0.639	0.711

(Table 3)

Table 3 show results of discriminant validity analysis. Fornell Larcker criterion compares the square root of the average variance of latent variable with correlation of constructs. A latent construct should be greater in variance than other constructs (Hamid et al, 2017). In above table, CSU, create a sense of urgency variance is 0.804> other latent constructs in respective row and column. FPC, Form a Powerful coalition variance is 0.786> than other constructs in respective row and column. Likewise, CVS, Create a vision, COVS, communicate the vision, EMAC, Empower action, CSTV, create short term wins, COG, Consolidate gains, and ACIC, Anchor change in the culture variances are greater than variances of other latent constructs in each of variable's respective rows and columns. Therefore it is pertinent to know, in observed data constructs are significantly different from one another.

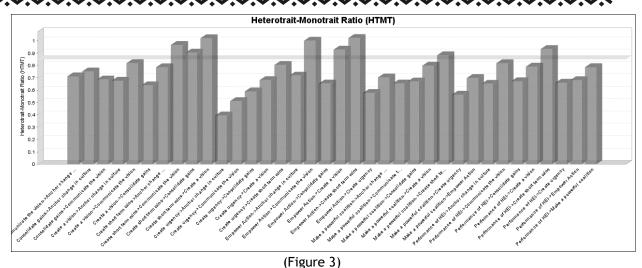


Figure 3, HTMT ratio > 0.90 indicates absence of discriminant validity in the data (Hamid et al, 2017). In above figure Bars with red color show values> 90. Few items have collinearity issue, like Create Short term wins variance 0.785< 0.966 communicate the vision, 0.904 Consolidate gains, 1.02 Create a vision. Another issue of multicollenearity found in Empower action variance 0.717 < 1.00 Communicate the vision, 0.927 Create a vision, 1.022 Create short term wins. Last is performance of Higher education institutes 0.651< 0.932 Create short term wins. These few items have multicollinearity issue, however all other constructs show significant difference between variances of constructs and not have problem of multicollinearity.

DISCUSSION

Above results show observed data is having significant validity and reliability. Construct validity results of all independent and dependent variables is >0.50, therefore each of the constructs are highly loaded and correlated with their respective variables. Reliability results are also significant, all eight independent variables and one dependent variable having reliability values >0.70. Observed data is said to be reliable. Standardized Mean Square Residual (SRMR) value 0.078<0.08 and Normed Fit Index 0.930>0.9 show the model is best fit. Likewise Predictors are moderately correlated with one another, so they do have combined effect on dependent variable. All predictors have VIF values between 1-5. In the last, discriminant validity was also measured using fornell Larcker criterion and HTMT ratio. It is important to see whether constructs significantly differ from each other or have problem of multicollenearity. All results show significant values existing discriminant validity among constructs using Fornell Larker criterion however few constructs have issue of multicollenearity using HTMT ratio.

CONCLUSION

It is concluded that eight step model of change significantly affects performance of higher education institutes. Three main stages of the model, i-e creating a climate for change, engaging and enabling the organization and implementing for sustaining change involving eight steps found important for improving academic and administrative performance of higher education institutes. Change management is unending task of any organization as change is continuous in nature therefore Kotter's change model is roadmap of implementing and evaluating change in desired areas. Wentworth et al. (2018) concluded that adopting and implementing Kotter's model for change improves academic and technological performance of higher education institutes. Aziz (2017) endorsed that Kotter's eight step model of change helped in identifying barriers and overcoming these for enabling change to happen. Sittrop and Crosthwaite (2021) endorsed that Well known change model can be implemented in organization to minimize risk and increases chances of success.



LIMITATIONS

This research includes three large public sector universities existed in jamhoro, city Pakistan. Other researchers can study Kotters' change management models in private education institutes too. Furthermore various models for change can also be studied in educational institutes other than Kotters' model for change. Researchers can extend geographical areas to include educational institutes of other cities in sindh province as well as other provinces of the country and federal capital. It would be more pragmatic to know further research findings in context of change management models and their significant effects on performance of educational institutes.

PRACTICAL IMPLICATION

This research would be valuable insight for higher education institutes for incorporating and implementing change and make it meaningful and successful for improving academic and administrative performances. Furthermore private education institutes can plan and implement change following Kotters eight step model as well as other prominent models for change. These change management models provide planned model for change which can minimize risk, increases chances of success and returns as well as overcoming barriers in way to implement change.

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