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Total Quality Standards to Activate Sports Training Process in Sports Competitions.

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Abstract

The quality of Physical Education and Sports is considered a process to achieve the needs and desires of the beneficiary or customer expectations in sports institutions in various sports activities. In fact, achieving the required level and quality performance in sports institutions depends on vocational and scientific preparation at different sports institutions and activities. Thus, it was important to take into account this modern management style and try to take advantage of the training process for each of the coach, player and administrator. In order to achieve effective administrative work in Egyptian sports federations we must rely on the criterion of intonation in administrative practices. Quality is no longer just, standards, targets or set of requirements which sports federations seek to achieve, but it became a continuous effort built on the methodology of appropriate continuous improvement, innovation and development to achieve the objectives of the sports federations as winning in Olympic tournaments. The present research aims at determining the Total Quality Standards needed to activate the sports training process in sports competitions through: the senior management focus on beneficiaries to achieve their needs and desires, quality level of sports training programs, coaches absorbance of the scientific principles and foundations of athletic training, availability and use of physical, human and information technology resources in sports training programs, financing plans of athletic training programs for marketing tournaments and competitions and using beneficiaries' incentives principle (physical and moral). The research team followed the descriptive approach as it suits the research nature. Research sample consisted of (110) board members, technical staff, administration staff, and players, some of which were individuals or team sports federations. The questionnaire form has been used as a tool for data collection. Study results proved the need for the application of Total Quality Standards to activate the process of training in sports competitions.

Keywords: Total Quality, Sports Training, Sports Competitions...

Introduction:

he concept of total quality management (TQM) and its principles are within modern management concepts which aims at improvement and development on an ongoing basis, TQM principles are employed to service sport activity's purposes in general, and athletic training field, in particular since this field is particularly important in the preparation of sports teams on various types and levels. (Ahmed, 2004:p376), (Oakland, 2000:pp13-14), (El-Shafei, 2003:p30)

Management plays an important role in the successful training, and in providing a lot of coaching to improve the effectiveness of the training process management. (Goetsch,2006), (Sakthivel, Rajendran& Raju,2005), (Abdel-Khalek,2003) Therefore, Egyptian state recently tended to give concern to sports, policies organizing its relations with sports authorities and bodies were set to achieve optimal cooperation, as an attempt to develop sport and access global levels. Strategic plans were

developed for implementation of several projects as National sports juniors' preparation at talents junior school, and the National Project for Olympic champion preparation, to guarantee success, Egypt state mobilized all human and physical resources to ensure its honorific representation in international tournaments and forums.

Analysis of National teams results at Regional, African and International tournaments revealed that these teams got "gold, silver" medals in Regional and Arab competitions while not achieving any medals on the international level and this emphasizes that access competitive international level need preparation of integrated teams for various activities.

Personal interview results (appendix 1) with some members of the technical committee of some Egyptian sports federations also confirmed - with (100%) - the lower level of training process quality due to low quality of available resources (courts, training halls equipped with latest tools and technological devices - as kinetic analysis

devices, Data Show, display screens, multiple purposes physical, physiological, and anthropometric measurement devices), Interview results also stressed availability of short-term plans only at sports federation, which are being developed by foreign coach without any involvement technical staff members,. The research team also familiarized themselves with the organizational structures (appendix 2, 3) for some Arabic and Egyptian sports federations; they noticed that Arabic Federation give concern for quality management, while there is no such interest by Egyptian unions.

This was confirmed by study results of Qeshda, 2007, Shon, 2008, which demonstrated the importance of ability of quality management of various sports federations, which ensures achieving quality in all training plans, coaches performance, appropriate training environment which have all human and physical resources, as well as providing a number of training courses.

Al-Muhanna ,2003, Ahmed & Farghally, 2003 & Abdel-Maabod ,2005 studies results recommended the importance of availability of quality management in some sports federations to improve the training process components for many sporting activities which reflected positively on these federation results in tournaments and competitions..

Due to personal interview results, analysis of organizational structures of some Egyptian and Arab sports federations, and the results and recommendations of the previous studies emphasized the importance of having a quality management. Research team was leaded to address this issue, "Total Quality Standards to Activate Sports Training Process in Sports Competitions " as an attempt to develop the Egyptian sport to become an accessible global competitions.

Determine the Total Quality Standards to Activate Sports Training Process in Sports Competitions through identifying:

- 1- senior management focusses on beneficiaries to achieve their needs and desires.
- 2- quality level of sports training programs.

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- 3- coaches' absorbance of scientific principles and foundations of athletic training.
- 4-availability and use of physical, human and information technology resources in sports training programs.
- 5- financing plans of athletic training programs for marketing tournaments and competitions.
- 6- Using beneficiaries' incentives principle (physical and moral).

Research queries:

- 1- What are the requirements of senior management focus on beneficiaries to achieve their needs and desires?
- 2- What are the requirements to determine quality level of sports training programs?
- 3- What are the requirements of coaches' absorbance of scientific principles and foundations of athletic training?
- 4- What are the requirements of availability and use of physical, human and information technology resources in sports training programs?
- 5- What are the requirements of applying financing plans of athletic training programs for marketing tournaments and competitions?
- 6- What are the requirements for using principle of physical and moral stimulation of beneficiaries?

Research procedures:

I- Research Methodology: The research team used the descriptive approach as it suits the research nature.

II-Research sample: Research sample selected randomly represented from the following categories, "Board members, administrative and technical members, and players," from single and team sports federations (football, handball, basketball, hockey, volleyball, swimming, table tennis, taekwondo, athletics, gymnastics). Where total sample consisted of (190) subjects, (20) subjects were excluded due to incomplete questionnaire, (60) subjects allocated to the pilot study, so main study sample was (110) subjects.

III: data collection: tools

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Questionnaire was used as a data collection tool. The research team, followed the following steps to design the research tool: Questionnaire aspects (appendix 4) and subaspects were determined throw personal interview results(appendix 1), access to scientific literature and previous studies results, looking at organizational structures of some Egyptian and Arab sports federations (appendix 2.3). These aspects and sub-aspects and presented to (7) sport management, sports training and quality management experts (appendix 5) to express an opinion on the appropriateness of these aspects to achieve the research's objectives, then research team worded the (77) statements under various aspects, which presented in its the initial form (appendix 6) to the experts, this process

resulted in modification of statements numbers (5, 20, 68) numbers and the deletion of statement number (77), the final questionnaire form (appendix 7) with (76) statement was ready to administration to research sample.

- Scientific transaction to form the questionnaire:

Questionnaire validity and reliability

- I- Questionnaire validity: two methods were used to ensure questionnaire validity
- A Content Validity (Experts validity): The research team introduced the questionnaire aspects and statements initial form (appendix 4,5) to (7) experts (appendix 5)
- B Internal consistency validity: The correlation coefficient between each aspect and questionnaire total ranged between (0.795: 0.849), all significant at 0.01 level and thus the questionnaire have a high validity degree.

II- Questionnaire reliability: the values of alpha Cronbach reliability coefficient was 0.866, indicating a high degree of reliability for its aspects and sub-aspects and possibility of questionnaire (appendix 7) administration.

Statistical work: percentage- Cronbach alpha coefficient – Chi square

Results and Discussion:

The research sample consisted of three categories, differences between their average score on each aspect were calculated to determine the extent of their agreement or differences on acceptance or rejection of the aspects and sub-aspects using One-way Analysis of Variance as shown in the following table:

Table (1)

One-way Analysis of Variance of research aspects and sub-aspects according to sample categories

Aspects and Sub-aspects	Variance Source	sum of squares	degrees of freedom	Mean squares	F
I aspect	between groups	154.86	3	51.62	2.17
Senior management focus on beneficiaries to achieve their needs and desires	within Groups	2568.91	108	23.79	
desires	Total	2723.78	111		
II aspect Quality level of sports training programs					
	between groups	171.01	3	57.00	0.91
first sub-aspect	within Groups	6791.48	108	62.88	
	Total	6962.49	111		
	between groups	154.86	3	51.62	2.17
second sub-aspect	within Groups	2568.91	108	23.79	
	Total	2723.78	111		
	between groups	70.47	3	23.49	1.23
III aspect Coaches' absorbance of scientific principles and foundations of athletic training and how to implement them	within Groups	2065.30	108	19.12	
	Total	2135.78	111		
IV aspect Availability and use of physical, human and information technology resources in sports training programs for sports competition					
	between groups	141.71	3	47.24	1.17
first sub-aspect	within Groups	4349.40	108	40.27	
	Total	4491.11	111		
	between groups	23.72	3	7.91	0.64
second sub-aspect	within Groups	1319.37	106	12.45	
	Total	1343.09	109		
V aspect: Financing plans of athletic training programs for marketing tournaments and competitions as one of financing recourses.					

Aspects and Sub-aspects	Variance Source	sum of squares	degrees of freedom	Mean squares	F
	between groups	101.30	3	33.77	1.91
first sub-aspect	within Groups	1910.95	108	17.69	
	Total	2012.25	111		
	between groups	70.47	3	23.49	1.23
second sub-aspect	within Groups	2065.30	108	19.12	
	Total	2135.78	111		
	between groups	23.72	3	7.91	0.64
VI aspect: Using beneficiaries' incentives principle (physical and moral).	within Groups	1319.37	106	12.45	
	Total	1343.09	109		

F significance at (DF 3, 106) and significance level (0.05) = 2.68

The above table results reveal that the differences between research sample categories responses to questionnaire and sub-aspects were not statistically significant which lead research team to consider all the categories as one sample in the statistical work

Table (2)
Mean, standard deviation and "T" values " for first aspect statements

No	Mean	Standard deviation	"T" value	No	Mean	standard deviation	"T" value
1	1.69	0.54	13.50 **	12 a	1.69	0.54	13.50 **
2	1.59	0.72	8.69 **	12 b	1.61	0.61	10.50 **
3	1.58	0.69	8.87 **	12 C	1.61	0.62	10.30 **
4	1.63	0.57	11.80 **	12 d	1.55	0.69	8.34 **
5	1.61	0.53	12.20 **	13	1.55	0.66	8.84 **
6	1.61	0.71	8.99 **	14	1.55	0.66	8.84 **
7	1.51	0.81	6.59 **	15	1.65	0.63	10.80 **
8	1.59	0.72	8.69 **	16	1.65	0.63	10.90 **
9	1.65	0.63	10.80 **	17 a	1.63	0.57	11.50 **
10	1.62	0.57	11.30 **	17 b	1.65	0.6	11.50 **
11 a	1.63	0.57	11.50 **	17 C	1.51	0.75	7.11 **
11b	1.65	0.6	11.50 **	17 d	1.64	0.52	12.80 **
11 c	1.51	0.75	7.11 **				
11 d	1.64	0.52	12.80 **				

T significant at (0.01) significance kevel= 2.62

The above table results reveal that "T" calculated values are greater than "T" significant value at 0.01 level, which indicate non-availability of significant differences research sample responses, where they stressed the importance of Senior management focus on beneficiaries (players, coaches, administrators) to achieve their needs and desires. So establishment should be concerned with customers' demands and adopt their complaints and suggestions, and to identify the changes that occurred in their tastes as well as the development of relations with

them through developing an information system helps the establishment to work to satisfy their desires and needs, which prompts them to success in the application of quality philosophy. This was confirmed by Aerhan and Mergen, Grant & Widrick , 2000 , (Ghoneim,2004: p334), (Oakland,2000: p23), (Gendy, 1999: p109). Research team is in the opinion that success of applying quality management depends on the extent sports federations officials of awareness with total quality culture and the development of an integrated framework to provide

appropriate conditions for successful and effective implementation to achieve beneficiaries satisfaction, optimal use of available resources, and increase sports

federations development and innovation ability, and increase organizational effectiveness and competitiveness ability. Thus, First research query has been answered

Table (3)
Mean, standard deviation and "T" values for second aspect statements

No	Mean	Standard deviation	"T" value	No	Mean	standard deviation	"T" value		
	First aspect				Second aspect				
18 a	1.65	0.68	10.00 **	24	1.60	0.64	9.86 **		
18 b	1.69	0.57	12.70 **	25a	1.65	0.68	10.00 **		
18 c	1.67	0.68	10.40 **	25b	1.63	0.57	11.50 **		
18 d	1.39	0.87	4.72 **	25C	1.55	0.7	8.18 **		
19	1.59	0.64	9.69 **	25d	1.65	0.7	9.86 **		
20	1.62	0.57	11.30 **	25H	1.63	0.57	11.50 **		
21	1.65	0.68	10.00 **	26	1.52	0.69	7.91 **		
22 a	1.61	0.56	11.40 **	27 a	1.34	0.64	5.52 **		
22 b	1.65	0.55	12.50 **	27 b	1.66	0.53	13.10 **		
22 c	1.51	0.69	7.77 **	27 C	1.69	0.57	12.70 **		
22 d	1.53	0.59	9.44 **	27 d	1.55	0.67	8.66 **		
23	1.53	0.7	7.90 **	28	1.67	0.68	10.40 **		
				29a	1.69	0.67	10.80**		
				29b	1.61	0.56	11.40**		
				29c	1.65	0.55	12.30**		
				29d	1.65	0.55	12.50**		
				29e	1.52	0.69	7.91**		
				29f	1.63	0.57	11.50**		

T significant at (0.01) significance kevel= 2.62

The above table results reveal that "T" calculated values are greater than "T" significant value at 0.01 level, which indicate non-availability of significant differences research sample responses on first sub-aspect statements "quality sports training programs are based on developing time plans as per scientific bases and foundations. In this regard Hammad (2001, p258), Ojasalo (2001,pp20-21), Hassan (1997, pp233-234) agreed that there are considerations and foundations must be observed by training specialists in training module design to ensure its success, and that long-term sports training planning is associated with sports development at the state level which is in turn linked to human development plans in all health, educational and social aspects.

As for the second sub-aspect the research sample agreed that sports training programs quality depend on the quality level of measurement and evaluation processes. Agree both on Fahmi Pick et al. (2009), Mufti Ibrahim (2003), Zaki Mohammed Hassan (1997) agree that successful coach must implement planning foundations of annual training plan, taking into account the rules of evaluating each training element in the annual training plan and detailed methods id this evaluation, and also propose steps to program evaluate and reform the light of evaluation process results by determine what it program elements must be supported or developed or modified. (12:27), (19: 87), (9: 212). Research team in the opinion that applying TQM in sports federations is essential and critical for advancing athletic level, by developing long-term plans, training programs and take into account the modernization and renewal, and keep pace with global and Arab developments, plans should be subject to continuous evaluations, with help of trained experts and leaders with efficiency and long experience in their athlete field. Thus, second research query has been answered

Table (4)
Mean, standard deviation and "T" values for third aspect statements

No	Mean	Standard deviation	"T" value	No	Mean	standard deviation	"T" value
31	1.71	0.49	15.00 **	38 a	1.64	0.59	11.40 **
32	1.75	0.44	17.90 **	38 b	1.65	0.61	11.00 **
33	1.53	0.69	8.05 **	38 C	1.75	0.44	17.90 **
34	1.68	0.62	11.50 **	38 d	1.62	0.62	10.40 **
35	1.56	0.72	8.17 **	38 e	1.76	0.45	17.90 **
36 a	1.70	0.58	12.60 **	38 f	1.71	0.56	13.20 **
36 b	1.65	0.61	11.00 **	39	1.61	0.68	9.41 **
36 c	1.69	0.55	13.10 **	40	1.63	0.62	10.60 **
36 d	1.75	0.44	17.90 **	41	1.53	0.69	8.05 **
37 a	1.64	0.5	13.30 **				
37 b	1.63	0.52	12.60 **				
37 c	1.62	0.62	10.40 **				
37 d	1.69	0.55	13.10 **				

T significant at (0.01) significance kevel= 2.62

The above table results reveal that "T" calculated values are greater than "T" significant value at 0.01 level, which indicate non-availability of significant differences research sample responses, where they stressed the importance of coaches' absorbance of scientific principles and foundations of athletic training. Abdel-Rahman, Nabila & Fikri (2004, p8), Hammad (2003, 17), Hassan (1997, p233) all stresses the importance of studying training load levels for successful coach, represented in the extent of impact and reaction both load intensity and volume on the player. Training load has been divided into five levels. Training unit with its various types is the cornerstone

which coach based on, so it should get special attention due to what it achieves from raising many training elements. Research team is in the opinion that the availability of many competencies which make the coach able to implement and apply quality management and propose future scenarios for training programs fit in with his technical and sporting tasks in light of various sports competitions. Sports organizations get its competitiveness reputation from coaches qualities and characteristics in all sports activities and events. Thus, Third research query has been answered

Table (5)
Mean, standard deviation and "T" values for fourth aspect statements

No	Mean	Standard deviation	"T" value	No	Mean	standard deviation	"T" value		
	First aspect				Second aspect				
42 a	1.86	0.44	20.70 **	48	1.74	0.54	14.40 **		
42 b	1.71	0.56	13.20 **	49	1.81	0.42	20.30 **		
43	1.62	0.62	10.40 **	50	1.72	0.53	14.30 **		
44	1.72	0.51	14.80 **	51 a	1.61	0.49	13.00 **		
45	1.65	0.61	11.20 **	51b	1.55	0.58	9.96 **		
46	1.57	0.6	10.10 **	51C	1.77	0.52	15.60 **		
47	1.55	0.67	8.66 **	51d	1.64	0.63	10.60 **		
				51e	1.72	0.51	14.80**		
				51f	1.56	0.5	11.90**		
				52	1.69	0.5	14.40**		
				53	1.69	0.52	13.90**		

T significant at (0.01) significance kevel= 2.62

The above table results reveal that "T" calculated values are greater than "T" significant value at 0.01 level, which indicate non-availability of significant differences research

sample responses on first sub-aspect statements; where they stressed on the importance of availability of physical, and human resources in sports training programs for sports competition. Hammad (1999, p9), El-Bek, Abu Zaid & Khalil. (2009,p31) agree that determine how to achieve athletic training plan's objectives through a variety of available resources (physical and human) is essential to achieve set objectives distributed in the period of time within the framework of specific policies and procedures.

Research sample also stresses the importance of availability information systems for planning, design and

implementation of sports training programs. Abbas (2002) study results indicate the existence of correlation and reciprocal relationship between the total quality administrative system and the information system where date is important input to information system which is processed and transferred outputs. Thus, fourth research query has been answered.

Table (6)
Mean, standard deviation and "T" values for fifth aspect statements

No	Mean	Standard deviation	"T" value	No	Mean	standard deviation	"T" value	
	First aspect			Second aspect				
54	1.66	0.58	12.00 **	63	1.56	0.5	11.90 **	
55	1.72	0.53	14.30 **	64 a	1.69	0.5	14.40 **	
56 a	1.58	0.67	9.12 **	64b	1.69	0.52	13.90 **	
56 b	1.56	0.61	9.63 **	64C	1.65	0.55	12.30 **	
56 c	1.58	0.6	10.20 **	65a	1.73	0.52	14.60 **	
57	1.77	0.48	16.80 **	65b	1.66	0.58	12.00 **	
58 a	1.73	0.65	11.80 **	65C	1.67	0.56	12.60 **	
58 b	1.70	0.55	13.30 **	66	1.69	0.65	11.20 **	
59	1.58	0.67	9.12 **	67	1.73	0.65	11.80 **	
60	1.50	0.55	9.46 **					
61 a	1.60	0.64	9.86 **					
61 b	1.57	0.71	8.46 **					
62 a	1.67	0.69	10.20 **					
62 b	1.75	0.53	15.00 **					
62 c	1.65	0.52	13.10 **					
62 d	1.72	0.53	14.30 **					

T significant at (0.01) significance kevel= 2.62

The above table results reveal that "T" calculated values are greater than "T" significant value at 0.01 level, which indicate non-availability of significant differences research sample responses; where they stressed on the importance of availability of Financing plans of athletic training programs for marketing tournaments and competitions as one of financing recourses. Hassan (1997) argues that it is necessary to determine of program budget from means and methods required to achieve objectives in light of available means and faculties and the necessary internal or external team camps, program budget must be specified as percentage from overall club budget, as well as determine financing sources.

Research sample also agreed on the importance of taking into account a variety of financing sources for sports training programs such as sports marketing and various other methods. This is in line with what referred by Ramady (2012, pp70-71) that sports tournaments marketing rely on clear terms and conditions, including sports sponsorship, television and advertising, where application of the total marketing concept is applied in all sports fields. Television is the main financing resource for sports activities, where television broadcast rights in addition to advertising rights have become an essential resource in financing sports tournaments. Thus, fifth research query has been answered

"T" "T" Standard standard No Mean No Mean deviation value deviation value 68 1.67 0.51 13.90 ** 73 1.65 0.55 12.30 ** 1.58 0.5 74 1.63 0.59 11.20 ** 69 12.30 ** 70 1.72 0.53 14.30 ** 75 1.72 0.53 14.30 ** 71 1.59 11.70 ** 76 0.64 10.00 ** 0.53 1.61 72. 11.50 ** 1.58 0.53

Table (7)
Mean, standard deviation and "T" values for sixth aspect statements

The above table results reveal that "T" calculated values are greater than "T" significant value at 0.01 level, which indicate non-availability of significant differences research sample responses; where they stressed on the necessity to use beneficiaries' incentives principle (physical and moral). Hassan (1997, p364-370), Osman (2004), El-Shafei and Musa (2007), Abdel-Maabod (2005) study results argue that application of incentive system make players feel seriousness and make them link between act and reward resulting from it, and this emphasizes for developing policies special rewards system in multiple situations, according to the different playing times and based on performance during matches.)

Hammad (2003, p91) adds that successful coach must develop a system to reward players according to specific bases declared to either in rules booklet or in bulletin board. Thus, sixth research query has been answered.

Conclusions:

In light of research results following could be concluded:

First aspect: Senior management focus on beneficiaries to achieve their needs and desires through: fiving opportunity for beneficiaries to participate in refinement studies and courses, technical staff to participate in planning processes for training programs, provide security and safety factors for players, providing the latest information on sports training science and related sconces with performance development, use of information and technology in training program modules implementation.

Second Aspect: Sports training programs quality level determined by taking into account the necessity of planning for training programs through: Development of long-term and short-tem plans, consulting exchange between experts to develop and implement training plans, providing qualified individuals for planning processes. In addition to the necessity of taking into account measurement and evaluation processes through: measurements on a regular basis using objective means and methods, implementation of evaluation steps sequentially per logical and scientific bases.

Third aspect: the extent of coaches absorption for scientific principles and foundations of sports training and how to implement them in all sports training programs for sports competitions through: coaches realization of "training loads rationing, players performance levels, prepare the players and get to know their training experiences, ages and growth characteristics."

Fourth aspect: availability and use of physical and human resources and information technology in sports training programs for sports competition through: provision of budget for the maintenance of tools and equipments, providing the possibility of future expansion to meet the increasing number of practitioners, providing specialists in information systems to perform: "information retrieval, output, Information groups that record for the system, input, organize, analyze and store information, process "to ease the exchange of information between relevant authorities.

Fifth aspect: Developing plans for financing sports training programs for the possibility of marketing tournaments and competitions through: identifying and allocating the necessary budget for provision tools and equipment and complete periodic maintenance. In addition to providing a variety of other financing sources through: sports marketing, and concerts revenue and sale of souvenirs, take advantage of proceeds of "broadcast media like radio and television."

Sixth aspect: Using incentive principle (physical and moral) for beneficiaries and that by taking into account individual differences when using the incentives principle, taking into account to be applied objectively, linking incentives for beneficiaries effort, performance level and achievement at various competitions.

Recommendations:

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In the light of research conclusions, researchers recommended the following:

I- For the Ministry of Youth and Sports officials

- Reconsider the allocation of sports federations to commensurate with the game expansion.
- To provide the latest and best physical and human resources for training national teams
- Establishment of special sport halls for sports federations according to their importance and need.
- Held bilateral cooperation protocols between sports ministry and organization related to sports to complete the quality of training process
- Issuance of the necessary legislation for protection of beneficiaries - sports federations - to ensure sustainability of training process quality

II- For Egyptian sports federations officials:

- Applying total quality standards for sports federations to activate sports training process in sports competitions.
- Inclusion of total quality unit in organizational structure of sports federations
- Developing data base for sports federations and follow it through the competent departments and make websites for it.
- Give greater attention to the field of coaches, players and administrators training qualifying, by sports federations to keep pace with activity developments.
- Participation of technical staff and foreign expertise in developing training plans for raising training process qulaity.

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