

Are Conventions an Effective Continuing Professional Development Activity?

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Abstract: Continuing Professional Development (CPD) is a structured approach aimed to enhance and raise the technical skills and competence of professionals. In 2013, the Philippines, a law was passed requiring all professionals to earn CPD units before they can renew their professional licenses. One of the CPD forms is attendance at professional conventions. This study observed at least six conventions of two professional organizations in the Philippines and documented one of them using video, pictures, checklist, survey questionnaire and interviews. The structure to which the conventions were conducted reveals that it is more of occasion to mingle with colleagues in the professionals but less on acquiring technical skills and earning of competence. About three-fourths reasoned that attendance to the convention is more of maintaining good standing. It was documented that an average of 23% to 5.4% of registered participants was in the venue attending the technical sessions. Of those in attendance, a little more than a third of them are not attentive to the lecture/presentation, either sleeping, talking with colleagues or doing other things like playing with gadgets. Attendance to conventions only should not be enough as CPD units. A more structured program that will result in more effective skills and competence build-up be required from professionals seeking renewal of their professional licenses.

Keywords: PICE, Civil Engineering, Continuing Professional Education, Masters, PhD

1. Introduction

Continuing Professional Development (CPD) are necessary to safeguard the public, the employer, the professional and the professional's career (www.continuingprofessionaldevelopment.org). The CPD program ensures the capabilities of the professional is updated with the current standards of others in the same field; improves skills needed to deliver a professional service to the customers, clients and the community; and to advance the body of knowledge and technology within the profession (ibid). In the year 2000, the Continuing Professional Education (CPE) which is also known as a CPD was scrapped due to issues on corruption and

useless seminars just to earn CPE credits (Udani, 2002). The scrapping of the regulation made earning of CPD units not mandatory and professional organizations was left to decide to require it or not.

No individual can claim that he has all the needed knowledge and skills in his/her profession. They need to continue to educate themselves, and it's a lifelong process. In the absence of a mandate to earn CPD unit, the lifelong learning is in the hand of the individual. Making it mandatory-forces all professional to attend to CPD activity. Mandatory CPE has been proven to be effective for most practitioners. However, there were many barriers that prevented it from being fully effective (Wessels, 2007).

In the Philippines, a law was passed to strengthen the CPD program for all regulated professionals. Republic Act (RA) 10912 otherwise known as Continuing Professional Development Act of 2016 to promote and upgrade the practice of professions in the country (Senate of the Philippines, 2016). The CPD programs as stipulated in the law consist of activities ranging from structured to non-structured activities having learning processes and outcomes. There are 43 professional regulatory boards in the Philippines, 13 of which are engineering professions (www.prc.gov.ph).

Engineers together with S&T professionals are key players in making a country innovative, an important element for economic development (SPEA, 2010). In the 2014-2015 Global Competitiveness Report presented a high positive relationship between Gross Domestic Product (GDP) per capita and Global Competitiveness Index (GCI) where the first world country is congregating in the fifth stage. This stage which is the highest describes the countries as innovation driven (WEF, 2014). Innovation in S&T and engineering sector in the 21st century is fast and is so disruptive. Professionals in these sectors must continue to capacitate themselves and cope-up with the rapid changes. These capacity building activities are similar to those listed in many CPD programs in various parts of the world.

Unlike in more advanced countries, getting a license to practice engineering profession is shorter and easier. After completing a prescribed course (usually five years for engineering), and passing a licensure examinations (through a multiple-choice type exam), an individual can receive his license to practice professionally (ACPECC, 2012). In other parts of the world, the practice of engineering profession

requires more than just the college degree and licensure examinations. For example, the current civil engineering (CE) professional track in the US requires field experience before licensure examinations (ASCE, 2008). This will be enhanced in the future for a more focused experience and at least 30 Masters' degree unit will as a requirement for licensure examinations (ibid). After which, updating are required for these professionals through the CPD program in the 40 of 50 States in the US (Banic, et.al, 2015).

The main purpose of the CPD law (RA 10912) in the Philippines is to upgrade professional practice comparable to global standards among others (Senate of the Philippines, 2016). Section 2 of the law includes formal learning; non-formal learning; informal learning; self-directed learning; online learning activities; and professional work experience (ibid). One of the most common CPD units earning activity is attendance to seminars/workshops such as professional conventions which will allow the participant 1 credit unit per hour (PRC, 2013). This makes attendance to a three-day convention worth 24 CPD units. Engineers are required to earn at least 45 CPD units before he/she is allowed to renew their licenses (ibid) which mean the professional just need to attend two conventions in the three-year period.

In the Philippines, the entry requirement to be considered an Engineering Professional is weaker than the global standard. These put prime importance to CPD to make our professional comparable to engineers (specifically CE) from another country such as the US. If CEs in the Philippines will rely only on PICE conventions to earn CPD units, will it be enough?

2. Objectives

The paper aims to assess if conventions are effective continuing professional education/development activity. Specifically, the researchers have observed extensively the 2014 PICE National Mid-year Convention held in Baguio City Philippines. Findings were supported with experiences in attending PICE conventions from 2006-2014.

3. Methodology

3.1 Research Design: The study is descriptive design using naturalistic observation approach (www.simplypsychology.org). Data during the convention were gathered without disrupting the respondents during the convention. Privacy of observed individuals was secured. Most interviews were generated outside of the convention venue; others were through the use of Google forms.

3.2 Instruments: The assessment used quantitative and qualitative approaches using interviews, observation checklist and camera (video and still pictures) in analyzing participants' behaviors during the convention. Notes were also used to record other observations not captured by the camera.

3.3 Participants: The main participants to this assessment are those in attendance during the 2014 National Mid-year Convention held in Baguio City, Philippines. A total of 45 civil engineers were interviewed using a guide. Random pick of 15 participants in the venue was also asked according to their affiliation. Additional responses from colleagues in other engineering professionals were also sought using the same interview guide

through phone, mail Google forms, and social media.

3.4 Data Gathering Procedure: Data were gathered from the opening program until the closing program of the convention.

With the aid of a camera, video and still pictures were taken during the middle of the talk (approximately 5 minutes from the start of the talk). The number of people in attendance was determined through counting and was validated using the video and still shots taken. The video and still shots were used in determining the attentiveness and show of interest of participants on the topic delivered.

3.5 Statistical Analysis: The data was presented in frequency counts, relative frequency and mean. Chi-square test was used to determine the association between venue and attendance. A regression curve was generated based on data observed on the number of participants in the venue.

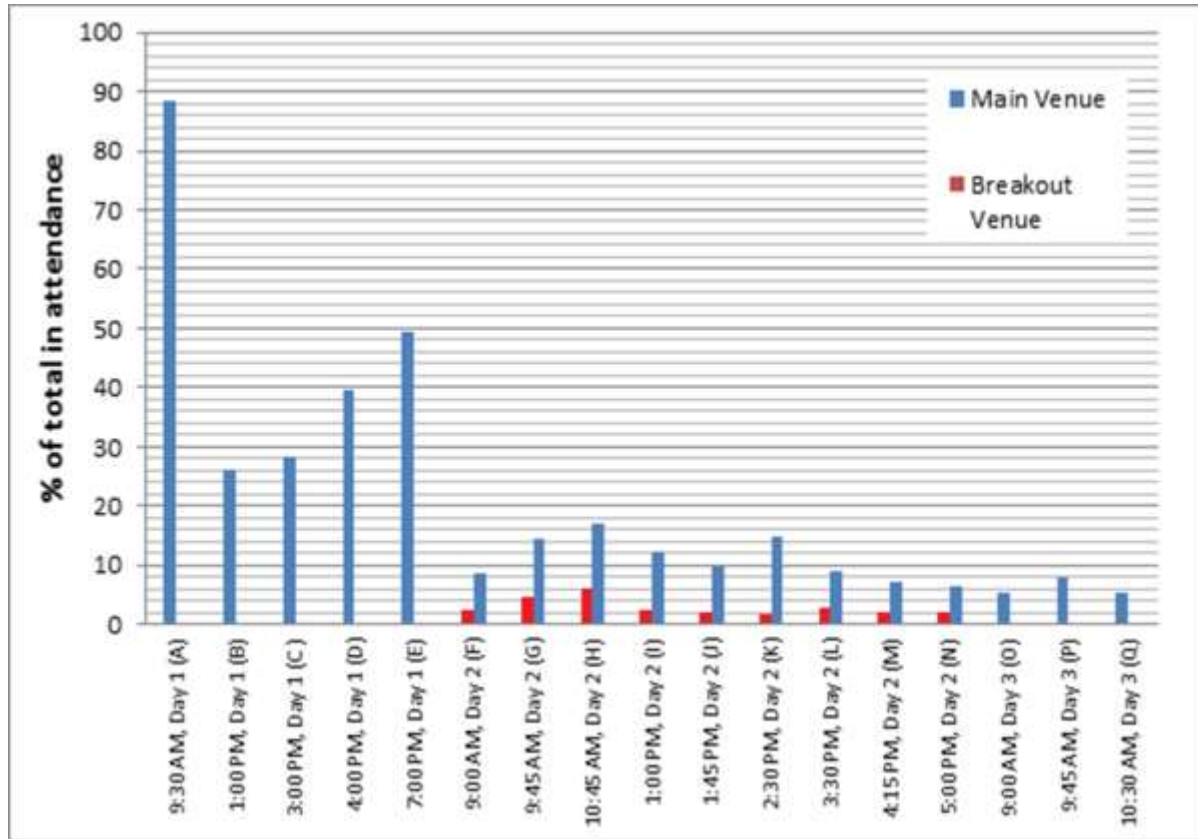
4. Results and Discussions

There is a total of 43 regulated professions in the Philippines, 13 of which are in the engineering field. Seven of these organizations have regular conventions (www.pinoyengineers.com, 2016), some profession like the Civil Engineers have more than two conventions yearly; the PICE Mid-year and the National Conventions as well as the Association of Structural Engineers of the Philippines (ASEP) Conventions.

The foregoing are observations made during the June 5-7, 2014 PICE Midyear Convention.

4.1 Participants who were in the venue

There were a total of about 2,500



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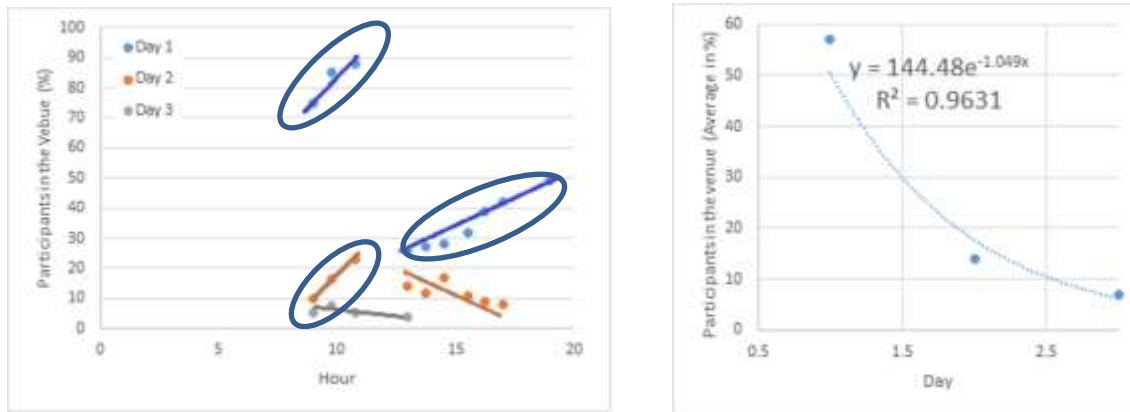
A Opening ceremony
 B Plenary session
 C & D Special lecture 1&2
 E Fellowship night
 F, G, H (right) Tech'I Session (Proj. Mgt. & Const. Eng'g)
 F, G, H (left) Tech'I Session (Geo'I Eng'g)

I, J, K (right) Tech'I Session (Structural Eng'g)
 I, J, K (left) Tech'I Session (Transportation Eng'g)
 L, M, N (right) Tech'I Session (Water Eng'g)
 L, M, N (left) Tech'I Session (Env'I & Energy Eng'g)
 O, P, Q General Topics
 $\chi^2 = 43.943$, $P = 5.8e-7$ (% distribution participants/venue)

Figure 1: Participants in attendance

participants in the convention; around 88% of them were in the venue during the opening ceremonies. Some of the participants were already in the vicinity when the opening program started; they were queuing at the registration booth while some arrived in the afternoon. Some were registered but were never in the venue. In the afternoon of day 1, the number of participants dropped to approximately 26% and increased to about 39% before the end

of plenary sessions. The number of participants rose to about 49% during the fellowship night and participants come and go. As other arrives, other choose to leave early. On day 2, the convention was divided into two tracks; one was in the main venue and the other was a smaller venue which can accommodate 800 participants. As shown in figure 1, percent of participants in the venue was reduced to about 11% and peaked at 23% just before the lunch was served. In the



(left) Morning and afternoon distribution (right) Proportion of participants per day

Figure 2: Percent of participants in attendance

afternoon of day two, the number of participants present in the venue was about 12% and peaked at about 17% with low of 8% before the sessions for the day's end.

General topics were presented on the morning of the third day and the first speaker was listened to by about 5% of the total participants registered and peaked to 8%. The convention ended with approximately 5% participants in the main venue.

It appears that more participants are in the main venue. Chi-square analysis suggests that the distribution of participants were significantly associated with the venue. These may mean that more participants are into the fields of Project Management, Construction Engineering, Structural Engineering and Water Engineering compared to Geotechnical Engineering, Transportation Engineering, and Environmental Engineering. In the list of CEs in the five specialty divisions around 56% and 21% are in project management and structural engineering, the highest among the five specialty division. These may also mean that participants preferred to

stay at the main venue and don't feel like moving. The later reason if true suggests a negative scenario. It would mean participants are there for convenience and not because they wanted to upgrade their knowledge in the field of CE.

Another critical issue illustrated in figure 1 and 2 is the fact that a huge number of registered participants were not in the venue.

Figure 2 illustrates the proportion of participants in attendance. The left figure emphasizes the three common upward trend. The three ends into lunch or dinner, the two downward trends have no other event at the end that the participants will receive something. This suggests that the increase in participants may not be related to the interest to the lectures but avail of something (in this case, meals). The right figure also suggests that the number of participants who are present in the venue declines exponentially from day one to day three.

Perhaps a portion of those who have left early was because the certificates were given together with the kits immediately after registration. According to those who were interviewed, this scenario is probably

Table 1: Percent of participants in attendance

Topics (Main Venue)	Time	% Total registered. participants	% attentively listening to the speaker	% Conversing with others	% Using gadgets (mobile devices, etc.)	% Sleeping/sleepy
Project Mgt. & Cons. Eng'g	9-12:00 AM	17.0	78.0	17.0	3.0	2.0
Geotechnical Eng'g	9-12:00 AM	4.5	82.0	10.0	5.0	3.0
General Topics	9-12:00 AM	6.2	85.0	10.0	5.0	0.0
Structural Eng'g	1-3:00 PM	12.0	34.0	50.0	11.0	5.0
Transportation Eng'g	1-3:00 PM	2.2	39.0	36.0	18.0	7.0
Water Engineering	3:5:00 PM	7.5	81.0	1.0	12.0	6.0
Env'l and Energy Eng'g	3:-5:00 PM	2.4	73.0	2.0	15.0	10.0
Average			67.0	18.0	10.0	5.0

attributed to the fact that the needed proof of attendance (certificates and the receipt of payment) is already with them. Proxy registration was also allowed thereby registering participants even if they are not physically present. One interviewed participant registered around five of his colleagues whom are not around and have never really attended.

Ten of the fifteen geodetic engineers who were asked about their conventions have said that certificates are handed in few days after the convention. It takes into account the attendance of the participants several times during the convention.

4.2 Behavior of participants during talks

There are many factors that may be attributed to participants' attitude during the convention. Factors like time, venue and topic were considered in the observations made. Those that were continuously conversing with another or in a given time which will influence learning were considered to not attentively listening to the speaker. The number of participants manipulating/using their mobile devices and

other gadgets while the session is going on was determined. Those showing indicators of sleepiness or those that are sleeping were included in the count of not attentively listening to the speakers.

As shown in Table 1, only about 67% of those in attendance are attentively listening to the speakers while about 18%, 10% and 5% were conversing with others, doing something else like playing/manipulating their mobile devices and either sleeping or sleepy respectively. Fifteen random picks from those in attendance reveal 67% (10/15) are connected to the academe.

4.3 CPD/CPE Units Acquisition Practices of Civil Engineers

Table 2 shows that all of those who responded to the interview have considered conventions as their mode of earning CUs. This means that with their certificates of attendance to conventions, the professionals can continue their practice with an

Table 2: CPD Activities Practiced

CPD Activity	f	%	Units
A. Seminars/Workshop			
Participant	45	100.0	1/hr
PICE/ASEP/Other Conventions	45	100.0	
Skills Trainings/Technical Workshop	25	55.6	
Technical Seminars	26	57.8	
Resource Speaker	2	4.4	5/hr
Panelist/Reactor	1	2.2	3/hr
Facilitator/Moderator	3	6.7	2/hr
B. Post Graduate/Specialty Training			
MS	3	6.7	1/unit + 20 upon completion
PhD	1	2.2	2/unit + 20 upon completion
Residency/externship/ specialty/ sub-specialty program	2	4.4	10/yr
Fellowship	0	0.0	15/yr
C. Self-Directed and or Lifelong Learning			
Training module	2	4.4	10/complete set of module
Technical paper/professional journal article	2	4.4	5/article
Research innovative programs/ creative projects	1	2.2	10
Book/monograph	1	2.2	2.5-40 (depending on number of pages and role)
Articles	3	6.7	2-8 (depending on number of pages and role)
Professional Journal Editor	0	0.0	5/issue
Peer Reviewer	2	4.4	2/article
Inventions	1	2.2	Full credit units for compliance period
Short-term post graduate in-service training	7	15.6	0.25/hr (30 max/training)
Study tours/visits	12	26.7	2/day (20 max/training)
Professional Chair	2	4.4	Full credit units for compliance period
D. Others	3	6.7	

assumption that they have acquired/updated their knowledge about the profession. As seen on Table 2, the highest percentage of participants in technical sessions is only about 21.5% with about 67% of them attentively listening to the lectures. This will result in about 14.4% of the total number of officially registered participants to the conventions probably acquiring new knowledge.

In accordance with PRC guidelines all professionals in the Philippines shall

acquire 45 credit units every three (3) years to renew their professional licenses. Each lecture/workshop hour from a CPD program is equivalent to one (1) CU (PRC, 2013). It means that attendance to the PICE Convention as a participant would earn a total of 20 CU for two and a half (2 ½) days or 20 hours activity. Since the certificate does not indicate some hours, PRC may count it as 24 hours or 24 CUs. There are two PICE conventions in a year which mean that the professional can earn the needed points to renew the license in just a year.

Table 3: Observations of PICE Convention Participants

Question	Responses	n	%
(1) Do you regularly attend PICE conventions?	Yes (both conventions/year):	6	13.3
	Yes (one convention/year):	17	37.8
	No (only if time and budget permits)	22	48.9
(2) What drives you to attend the convention?	Venue (nearby, new place to visit, tourist spot/destination)	21	46.7
	Updating/Learning	44	97.8
	Networking/Linkage	6	13.3
	Needed in renewing license	8	17.8
	Needed for the promotion	3	6.7
(3) How important are conventions to you in the practice of your profession?	Very important (I need to update myself, capability building and opportunity to meet leaders in the field)	23	51.1
	Just OK (Even if I don't attend, I can still learn from other ways)	19	42.2
	Not important (I don't see the event helping me professionally)	3	6.7
(4) What topic track you were interested?	Structural Engineering	10	22.2
	Transportation Engineering	3	6.7
	Water Engineering	5	11.1
	Environmental and Energy Engineering	4	8.9
	Geotechnical Engineering	4	8.9
	Project Management and Construction Engineering	2	4.4
	Other topics	0	0.0
(5) Can you recall any new ideas presented?	Yes (plenty)	8	17.8
	Yes (few)	32	71.1
	No	5	11.1
(6) Have you been updated through the topics presented?	Yes	33	73.3
	No	12	26.7
(7) Do you find time reading the technical papers during or after the conference?	Yes (all its contents)	4	8.9
	Yes (only the topics that interest me)	27	60.0
	No	14	31.1
(8) What can you say about the convention participants extent of participation	All of those in attendance are interested in the topics presented	37	82.2
	Only very few were in the venue	40	88.9
	Participants are passive; they lack the drive to ask questions	36	80.0
	Participants lacks confidence in asking questions	19	42.2
	Others are not attentive because they seem not interested in the topics/topics are boring	30	66.7
	Others did not participate at all (only registered but never around)	4	8.9
(9) Are you aware of CPE/CPD aside from conventions, what are another form of CPE/CPD activities that are recognized?	No	5	11.1
	Yes	40	88.9
	Formal Education (Masters' & Doctorate)	26	57.8
	Seminars/workshop/conferences	40	88.9
	Writing and publishing a book	3	6.7
	Conducting and publishing a research work	4	8.9
	Engineering Technology Patent/Utility Model	1	2.2
	Engineering Consultancy services	10	22.2
10) Would you like CPE/CPD be required for the renewing license?	Yes (83% says they will regularly attend conventions yearly)	24	53.3
	No (71% says "we can learn in other ways, requiring it will be costly for us")	21	46.7

The Philippine Assessment Statement for ASEAN Chartered Professional Engineer through the Committee Rules on Continuing Professional Education (CPE) has set activities that engineers can take to earn units. These units are needed to be admitted in the APEC Register Philippines. Like those in PRC memorandum, 1 CPE unit is given for every seminar or conference hours.

Engineers in the academe, specifically those in the SUCs are mandated to capacitate themselves through various forms. SUCs are measured on areas similar to what Table 2 enumerates such as the pursuit of Masters and Doctoral degrees, the conduct of research, invention, develop training modules, publish research articles, technical papers, books, manuals and others. These requirements are cascaded to the engineering faculty. Unlike other professions outside the academe, these requirements are seldom produced by an engineer in practice. This explains the 67% attendees of the technical session are coming from the academia sector. This also suggests that most of the engineers in practice will most likely earn their CUs under the seminar/workshop track specifically conventions.

The kind of management of conventions may result in a not effective mode of developing the competence of professionals, in this case, the civil engineers.

4.4 The PICE Conventions and the Participants Assessment

Conventions such as that which is regularly conducted by PICE are full of activities which are intended to capacitate the participants. The technical sessions cover all areas of the field; it is also a venue to interact with the leaders of the profession

as well as the experts. Based on programs of PICE conventions from 2013-2015, on average there is a total of four plenary talks from leaders of the field and 18 technical papers from experts in the fields of civil engineering. At least three relevant topics under Project Management, Geotechnical Engineering, Structural Engineering, Transportation Engineering, Water Engineering, Environmental Engineering as well as other topics concerning the practice of the profession are presented. Engineering technologies as well as civil engineering product are also on display. It also has other activities for the students as well as community engagements. Sports, entertainment and leisure events are also conducted to strengthen camaraderie.

Shown in Table 3 are the responses of 45 participants regarding conventions specifically those conducted by PICE. More than half of the participants interviewed attend PICE convention regularly and attended because they like to be updated about the practice of the profession and feel it is very important. Most of them have expressed that they have learned from the technical sessions and the technical papers which are included in the kit. Most of the respondents, however, observed that there were very few people during the technical sessions and did not interact with the paper presenters through asking questions or posting inquiries.

Most of the participants are aware that there are other forms of CPD/CPE activities. However, they are more aware that attending seminars, workshops or conferences will allow them to earn CUs. Very few know that writing a book; conducting, publishing research or patenting products of research will earn those CUs. A little more than half says further studies are potent sources of CUs.

A little more than half of the respondents agrees to make CPD units a requirement for renewal of licenses. When further asked how they will earn CUs, a majority expressed that they will just attend conventions. Those who do not favor says it's going to be expensive, and they can learn in many ways other than attending conventions.

5. Conclusions and Recommendations

The following conclusions are based on the observations made by the researchers and results of the interviews with randomly picked individuals.

1. A Huge proportion of registered participants was not in the venue to be educated on the advances in the engineering field and its practice. The number of attendees drops exponentially as the convention progresses.
2. About two-thirds of the participants who were attending technical sessions (or about one-tenth overall participants) listen attentively. However, they do not interact with the resource persons through questions and the likes.
3. Engineers view attending seminars and workshops (conventions included) as major source of CPD units; few are into formal education (MS and Ph.D.) and significantly low in self-directed forms such as researches leading to invention, publication, and the likes.
4. Generally, PICE conventions are full of technical and non-technical sessions aimed at improving a holistic civil engineering professional. The full participation in these activities will likely lead to an improvement of the practice of civil engineering.
5. The current management of the convention is likely to result in poor

absorption of knowledge shared during the convention. A monitoring system (preferably automated) to check actual attendance of participants may be implemented. Certificate of participation based on the verified attendance may result in a better participation of convention attendees.

6. Conduct/participation of/in other forms of CPD activities aligned to the specialization of the professional must be conducted/encouraged.

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