

On Pilot Generational Difference and China Airlines' Management Strategies

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1. General

The term “Generational Differences” is always mentioned and discussed when it comes to company management. It plays an important role when message is to be communicated and common beliefs to be shared among all employees, who are normally consisted of different generations. It's especially true to aviation industry, to which the assurance of safety relies on highly trained and appropriately-managed professionals. Unless the management acknowledges the existence of the differences, the diversified opinions of the different generations towards communication styles, learning preferences, interpersonal relationship, and workplace attitudes will inevitably influence the effectiveness of training and management.

Take CBT as instance. This convenient and cost-effective training media has been widely adopted throughout the industry. As more and more multimedia contents and hyper-link functions are incorporated into the material, very little consideration concerning whether or not the material is equally accessible to users of different generations is put. For instance, Baby Boomers (generally regarded as people who are born at 1946 to 1965) prefer straightforward and intuitive interface, whereas Millennials (born at 1978 to 1995) are more competent with multilayer navigation structure. The address of different learning preferences helps mitigate the gap resulted from generational difference, that is, the “Generation Gap”.

China Airlines has been expanding for the past few years. The “Gap” is observed when most of the recruited Millennial generation (or the so-called Generation Y) exhibit different behavioral patterns and express opinions in unconventional ways. The management started to investigate what are the differences and how do the systems can address and accommodate them. In this presentation, the focus is on pilots and instructor pilots. The generation distribution is examined and an analysis on respective communication, learning, and training preference is also shared. By understanding the specific requirement of different generations, suitable methods have been incorporated into China Airlines' training and managing programs to enhance safety and efficiency.

2. Differences between Generations

Generation names and age spans are defined more or less differently depending on country and/or area. The following generation names and age spans are used by CAL for definition.

- Baby Boomers: 1946–1965
- Generation X: 1966–1977
- Millennial (Y Generation): 1978-1995
- Post-Millennial/Generation Z: After 1996

To be able to have a big picture of the differences exist among generations, we produced the following tables based on relevant studies and surveys. One thing to be noted, due to the limited number of Generation Z employed as pilot by CAL currently, they are not yet considered in this paper—they will be SOON. We also provide statistical data on pilot generation composition by fleets.

Table 1. Characteristics of Baby Boomer, X Generation and Y Generation

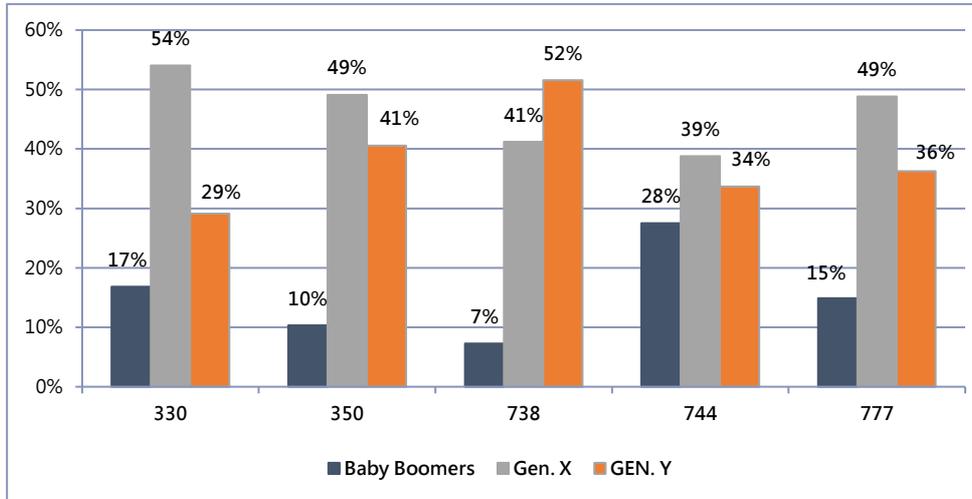
	Baby Boomers	X Generation	Y Generation
Born Year	1946-1965	1966-1977	1978-1995
Formative Experiences	<ul style="list-style-type: none"> - Cold War - Post-War boom - “Swinging Sixties” - Apollo Moon landings - Youth culture - Woodstock - Family-orientated - Rise of the teenager 	<ul style="list-style-type: none"> - End of Cold War - Fall of Berlin Wall - Reagan / Gorbachev - Introduction of first PC - Early mobile technology - Latch-key kids: rising levels of divorce 	<ul style="list-style-type: none"> - 9/11 terrorist attacks - Play Station - Social media - Invasion of Iraq - Reality TV - Google Earth
Aspiration	Job security	Work-life balance	Freedom and flexibility
Signature Product	Television	Personal Computer	Tablet / Smart phone
Communication Media	Telephone	E-mail and text message	Text or
Communication Preference	Face-to-face ideally, but telephone or e-mail if required	Text messaging or e-mail	On-line and mobile (text messaging)

Data Source: “An overview of the working generations.” Simplyhealth Insights

2.1 Crew Generation Distribution in China Airlines

China Airlines has been acquiring pilots in a good rate for the last 15 years. Therefore, as a whole, the generation distribution pattern is not very different from the pattern of most companies concerning workers at their appropriate working age. The general ratio is approximately 2: 5: 4 in the sequence of Boomers, Gen X, and Gen Y. CAL’s actual number is 17%, 46%, and 37% in that sequence). Refer to Figure 1 for fleet specific generation distribution based on data up to Oct. 2018.

Figure 1. Crew Generation Distribution by Fleet

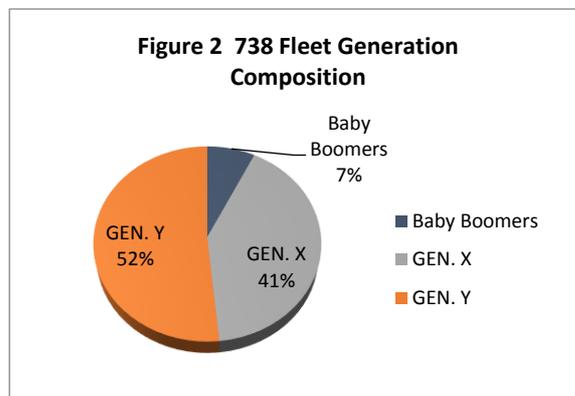


Data Source: 2018.10 China Airlines

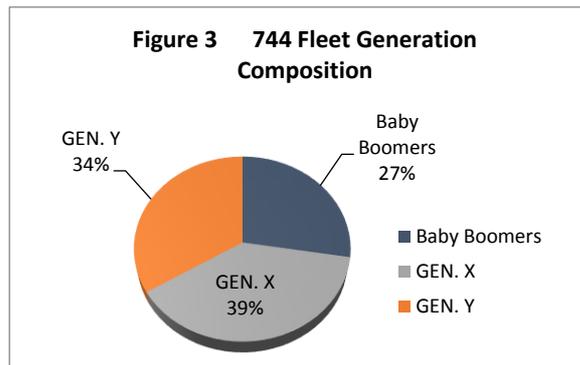
Gen X are relatively more experienced than Gen Y and may be more creative than the Boomers. Gen X don't like to be micromanaged.. The boomers are richer in operation experience and more resourceful in decision making. They can bring a sense of stabilization. However, they can be stubborn sometimes. Gen Y are energetic and more adaptable. On the other hand, they can be sometimes impulsive and opinionated.

Among the 5 fleets, except for 738 and 747 fleet, the generation distribution pattern is similar to the general one mentioned above. The Gen X outnumber the rest. The proportion of generations along with other factors, e.g., dispatch pattern or operation area, will affect the fleet management and consequently shape different fleet culture. We will cover the communication strategies later in this paper.

Take 737 fleet as an example, 52% 738 crew are Gen. Y. This fleet is active, full of energy and high acceptance for new things.



As for 744 fleet. Around 30% for each generation. The managers need to be more skillful to integrate crew's opinions to better manage them.



2.2 Instructor Generation Distribution by Fleet

Figure 4. shows the instructor's generation distribution in China Airlines by fleet. The majority instructor generation is X Generation in every fleet, then the Baby Boomer and Y Generation.

Figure 4 Instructor Generation Distributions by Fleet

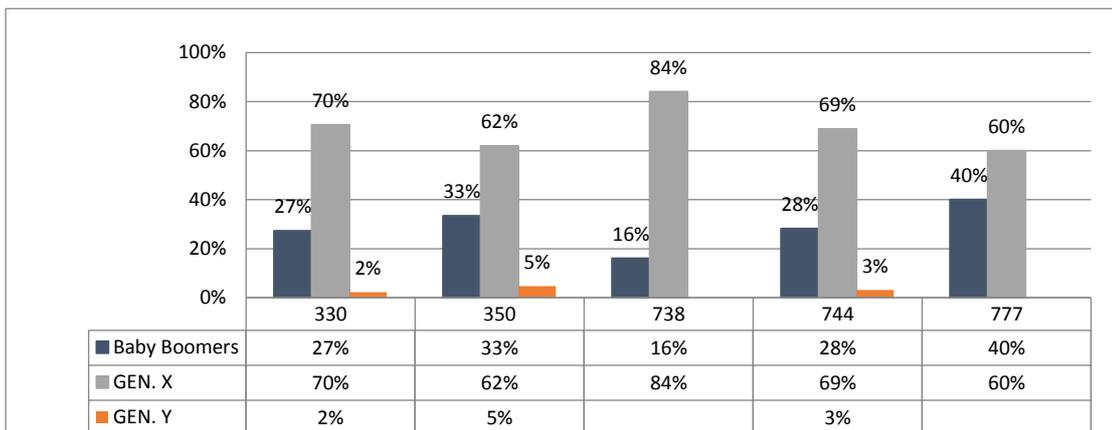
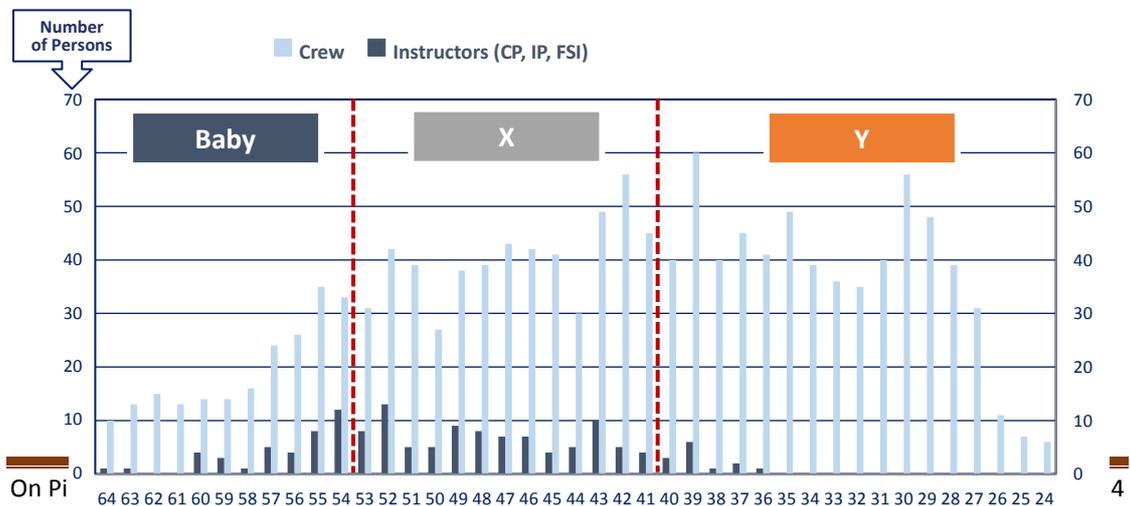


Figure 5. Age Distributions between Crew and Instructors



We break it down to fleet scope. We have fleet specific information as follows:

Figure 6 A330 Fleet: Generation Distributions between Crew and Instructors

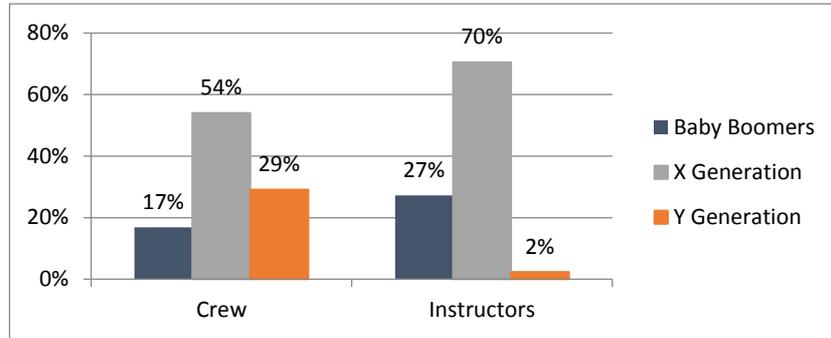


Figure 7 A350 Fleet: Generation Distributions between Crew and Instructors

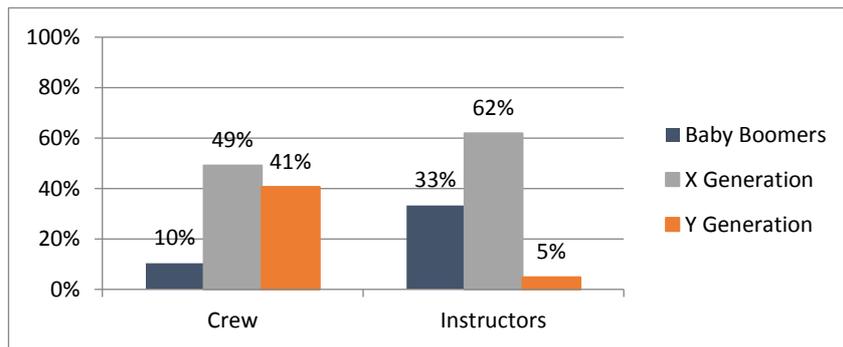


Figure 8 B738 Fleet: Generation Distributions between Crew and Instructors

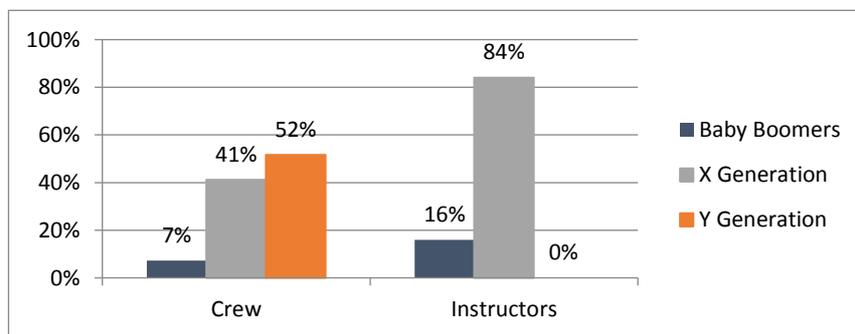


Figure 9 B744 Fleet: Generation Distributions between Crew and Instructors

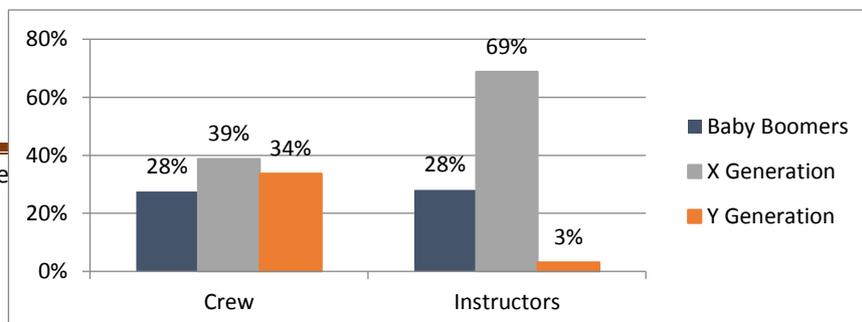


Figure 10 B777 Fleet: Generation Distributions between Crew and Instructors

3.1 Learner Traits and Instruction Strategies for Difference Generations

Tables are prepared to illustrate the learner traits and instruction strategies per different generations before we move on the discussion how CAL address them respectively to facilitate better training and management.

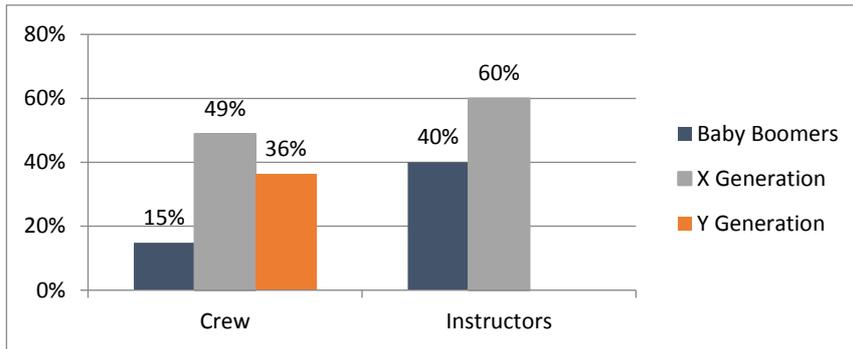


Table 2 Baby Boomers’ Learner Traits & Instructional Strategies

Baby Boomers’ Learner Traits	Instructional Strategies for Baby Boomers
<ul style="list-style-type: none"> - Appreciate process - Team work and collaboration - Self-improvement - Strong work ethic - Struggle with work/life balance - Independent and Self-assured. - Competitive - Mentally focused - Disciplined 	<ul style="list-style-type: none"> - Keep e-Learning course navigation simple and intuitive. - Tap into their personal experience. - Cater to a diverse rave of learning styles. - Allow them to set and track their own goals. - Include plenty of online group collaboration activities. - Center stories and activities on personal growth. - Offer individual praise and constructive criticism. - Let them see the big picture beforehand.

Data Source: “Generational Learning Styles (Generation X and Y),” Jason Griggs, Florida Institute of Technology.

Table 3 X Generation’s Learner Traits & Instructional Strategies

X Generation’s Learner Traits	Instructional Strategies for X Generation
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<ul style="list-style-type: none"> - Unlike the typically idealistic Baby Boomers, Generation X tends to be Skeptical and Cynical. - Independent and self-reliant (Sometimes referred to as “latch-key kids”) - Entrepreneurial thinkers - Resourceful / problem solvers - Defy authority - Reject the “pay your dues” mentality - Loyal to individuals, not organizations - Reality driven: how will a class help them in the real world? - Have a distaste for “touchy feely” teaching methods - Competent with technology - Intolerant of bureaucracy - Value freedom as the best reward - Multi-takers / balance work and life 	<ul style="list-style-type: none"> - Offer direct / immediate communication (emails and phones) - Get to the point and provide clear instructions - Avoid micromanaging them - Make assignments “real world” - Provide opportunity for individual work - Incorporate technology when possible - Use games and case studies
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Data Source: “Generational Learning Styles (Generation X and Y).” Jason Griggs, Florida Institute of Technology.

Table 4 Y Generation’s Learner Traits & Instructional Strategies

Y Generation’s Learner Traits	Instructional Strategies for Y Generation
<ul style="list-style-type: none"> - Tend to be optimists - Expects immediate feedback - Not accustomed to negative feedback - Short attention span - Wired 24/7 - More accepting of authority than Gen X - Sheltered (by their helicopter parents and politically correct world) - Team oriented - Strong sense of entitlement - Highly visual learners - Expects accommodations - As digital natives, they expect technology - Often concerned with style over substance - Opinionated 	<ul style="list-style-type: none"> - Gen Y likes to communicate through texting and social media - Provide clear objectives and standards - Develop self-assessment items - Provide opportunities for group work - Incorporate technology - Create a multimedia environment - Offer chances to multi-task - Give them group projects to complete - Connect to learners through social media

Data Source: “Generational Learning Styles (Generation X and Y).” Jason Griggs, Florida Institute of Technology.

4. Training and Management Strategies to Address Generation Differences in China Airlines

4.1 Training

Having discussed various learning styles and learner traits among different generations, here are some examples of what CAL has been doing to acknowledge these differences.

Concerning training, especially ground school and some of the recurrent trainings, specific considerations have been put into course designing and execution. For CBT (Computer Based Training, also called “e-learning” by CAL, mostly apply to initial training involving system knowledge, background information integration, and also recurrent training and testing), the navigation function and overall structure have been simplified and kept to minimal. Also excessive hyperlinks or fancy animation are avoided in the course material, so as to help the Boomers not to “GET LOST” while experiencing distance learning. Another consideration highly welcomed by the boomers is the “one click to enlarge text” function. Indeed, the function address more on the reading habit and deteriorating eye-sight of the boomer rather than issues of generational difference. On the other hand, to be able to arouse interest of the Y or the upcoming Z generations, the forum function for the users to exchange information and acquire real-time feedback is also available. The e-learning system is also designed to be compatible with portable devices, such as smartphones or tablets, to allow the Y and Z generation to access training material anytime and anywhere.

For the conventional classroom trainings, CAL periodically provides effective training/lecturing tips concerning multi-generational training environment during instructor recurrent training. The idea of continual updating instructors’ skills and practices according to generation composition in the classroom is also disseminated in the gathering. “Wagschal (1997) reports: ‘I’m not sure when it happened. I was no longer a contemporary of my students. The adults kept coming. Their ages stayed about the same, but I kept getting older... Who would have dreamed that it was no longer appropriate to ask a 30-year-old adult learner what they were doing when John F. Kennedy was assassinated?’” (Brown, 1997, para.5) Or is it appropriate when a similar question “What were you doing when the ROC lost its seat in UN” being asked to a 30-year-old Taiwanese pilot. To effectively provide instructions in the multi-generational classroom, instructors have to adapt. Before we get more in-depth on how instructors prepare themselves to the generational differences, let’s have a quick look on CAL’s guideline to accommodate different learning styles and learner traits during the course designing phase.

We take CAL’s TTT (Train the Trainer Training) course as an example, the course is

designed to meet all generations' learning preferences. As the Boomers prefer more lecture-oriented and personally-focused style, structured and organized training material are expected to draw their attention. Given the amount of experience the Boomers have, the training material should be carefully researched, truth-based, and logically presented to convince the Boomers the training is well worth their time.

Meanwhile, if the course contains only lectures and reading, it will eventually upset the X and Y generations. Therefore, the training material should be presented not only in the form of slides but also through group discussion, activities, and case studies. Gen X are especially prone to the real-world and pragmatic approaches. Case studies that can link to their experiences greatly promote participation. FAQs and "do and don't" can equally draw Gen X's attention. For Gen Y, multi-media presentation is what they are more used to. Insertion of some films that demo important topics of the material are very effective. The use of some hyperlinks among newly introduced topics is always more intuitive to the Gen Y.

When it comes to activities or games, the course designer has to be very cautious with the frequency of such kinds. It depends on the generation composition of the participants. Since the TTT training is for instructors all across the generation spectrum, considering CAL's instructor generation composition, the Boomers, the backbone of the instructing force, and who are more resistant to interactive activities, the use of games or interactive activities should be more restrictive than in other courses, say, CRM recurrent course. Therefore, it's always a challenge to the course designer to strike a balance among all generations' needs.

Apart from course designing, the successful execution of a training session also depends on the instructor's awareness of the generational differences. It is essential for the instructor to elaborate on the new ideas and topics first, since the Boomers appreciate the process and need a clear goal to achieve. The instructor is expected to maintain a certain level of formality, so as to acknowledge the Boomers' experiences and status with the company. It is especially true in oriental culture, where higher level of Power Gradient can be expected. While teaming up for group discussion or interactive games, it is advised to have the Boomers evenly scattered among the groups, for the Boomers are better team builders and opinion leaders who can help their groups become more productive.

As for the Gen X, they prefer self-directed and straight forward way of learning. They want to be provided reasons why they learn, that is; how this course will help me in the real world? They are often more skeptical and do not tend to show gestures of total agreement right away. The best strategy is to persuade them through demonstrating competencies rather than exercising authorities. They prefer facilitation than "show and tell".

Gen Y, on the other hand, is generally more acceptable to authorities. Scatter them among the Boomers and the X-ers during group activities help consolidate the training topics. They have short span of attention, so do not stress them with long monologue. Interlace the lecture with some activities make them participate more actively. Immediate feedback to their doubts and concerns is also helpful to their learning, since they are not patient problem solvers. Last but not least, Gen Y usually don't take criticism well.

To sum up, to teach in a multi-generational classroom is not an easy task. As Brown stated: "Effective instructions requires the teacher to step outside the realm of personal experiences into the world of the learner." (1997, para.6) The following instruction Methodology for multi-generation classroom is also proposed in the book Management by Stoner and Freeman on pages 254-259, and it was also shared to all CAL instructors in a recurrent session:

1. Identify the generational mix in the classroom via data collection, questioning and observation.
2. Identify students' values and classroom preferences.
3. Identify your personal values through research, personal insight, and reflection.
4. Identify conflicts in values and classroom preferences among students.
5. Identify conflicts in values between you and your students.
6. Develop instruction methodology (both process and content) which best encompasses student values/ classroom preferences and most effectively avoids or defuses value/ classroom conflicts among students and between instructor and students.
7. Deliver instruction.
8. Request feedback from students.
9. Refine instruction methodology.

4.2 Fleet Management

CAL has also observed that the generational difference has great influence on fleet management, since different generations have their communication preferences. The fleet generation distribution affects how the information is communicated. Recently, due to increased demand for an instant and secure communication tool to supplement information dissemination, CAL developed an in-house APP, named "TEAM+", for use on electronic devices, such as smartphones, personal computers, or tablets. According to the feedback from fleet office, CAL's Boeing 737 and Airbus 350 fleet, which are consisted of around 40% Gen Y pilots, have more active TEAM+ users than other fleets. Gen Y are wired almost 24-7. Information announced via the APP has a higher chance to reach them.

Generation X are generally more competent and comfortable with technology. Therefore, the active user count is undoubtedly more than that of the Boomers. Naturally, to the Boomers whenever there is an important message that requires immediate acknowledgement, a direct phone call or face to face communication is always more appropriate and effective.

In order to successfully close the communication loop, information is now delivered via multiple channels in CAL to satisfy different communication preferences of different generations. Information mandatory to all pilots will be sent via official vehicles simultaneously, e.g., official bulletins, such as FOIs (Flight Operation Information, containing in the flight document), company e-mails (receipt is required), or phone calls. Information that is less important or urgent will be sent via e-mail (receipt is not required), the company instant communication APP, or other third-party APPs.

Furthermore, CAL is trying to promote healthy “generation flow” among fleets, so as to avoid any fleet to be overpopulated with one of the generations. In CAL, fleet assignment for Initial pilots used to be based on manpower requirement. It’s very common that pilots get upgraded at the same fleet and will not transit to other fleets without specific reasons (e.g., introduction of a new fleet, personal health or family issues). With benefits of generation distribution adjustment and operation experience accumulation, CAL is planning to allow initial pilot to “zigzag” between short-haul and long-haul fleets. Initial pilots will start from short haul fleet, fostering solid manual control skills and building up competencies, such as workload management. Then they are transited to long-haul fleet for more experiences of different areas to prepare them for command training. When they are ready as captain candidates, they return to short-haul fleet. After a few years of short-haul captain experiences, depending on the manpower demand or generation balance purpose, they have the chance transiting to long-haul fleet again. In this way, ideally, all fleets can acquire pilots of different generations and experience level.

4.3 Management Pilot Recruiting

The Boomers generally accept “live to work” idea. They have strong work ethic and are more willingly to sacrifice personal life. They are now mostly top management level and make important decisions for the company. They preferred to be recognized by acknowledging their input, expertise, and prestigious job titles. They have strong loyalty to the company and are valuable assets to the company.

The complete takeover by Gen X is not far from now. However, Gen X’s motto to work is more leaning to “work to live”. They strive more towards a balance between work and life. Full devotion into work is not their first choice, even being offered monetary rewards. What really attract them will be work flexibility. Take CAL’s

management pilots as an example, Gen X are provided with tailor-made roster so as to manage their family, and work with deputies to share responsibility and help make decisions when they are away from the office. They don't have high organization loyalty but they respond to charismatic individuals.

Gen Y are more reluctant to work in a fixed workplace and requires more work flexibility than their predecessors. They like team-oriented workplace where extra effort and excellence will be rewarded. They also preferred a work place with gadgets and technology related products. Generally speaking, they are more productive when the top management can provide variety and rational for the work you've asked them to do and the value it adds. The above being said, this group has not spent much time in the workplace so this characteristic is yet to be determined. Therefore, more observation on Gen Y's motivation and performance should be made before the takeover time comes.

To sum up the influences of the generational difference: A lack of understanding across generations can have detrimental effects on communication and working relationship and undermine effective management. The more attention is spent in this field, the less conflicts and setbacks when it comes to multi-generational operation environment.

Reference:

Brown, B. (1997). New learning strategies for generation x. Retrieved March 3, 2002 from <http://ehostvgw5.epnet.com/delivery.asp?deliveryoption>.

Jason Griggs. Generational Learning Styles (Generation X and Y). Florida Institute of Technology. from <https://intra.cbcs.usf.edu/common/file/HireABull/Generational%20Learning%20Styles%20Handout.pdf>

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