This research aims at studying an elderly employment model for the Thai automotive industry. Mixed methods with a sequential exploratory strategy were utilized. Grounded theory was employed by using in-depth interviews to investigate the characteristics of elderly employment in the Thai automotive industry. For this stage of the research, theoretical and purposive sampling was used to select 32 key informants from four groups of stakeholders: (1) elderly workers, (2) employers or human resource managers, (3) government officers, and (4) academics. The findings were then validated using a quantitative approach with structural equation modelling (SEM). A total of 308 elderly workers and human resource managers were surveyed regarding their opinion about elderly employment. Based on the survey, the elderly employment model in the Thai automotive industry, which is comprised of the approach to elderly employment, elderly employment preparation, and key success factors for elderly employment, was revealed to be a good fit.

Keywords: Elderly employment, Elderly employees, Retention, Automotive industry, Mixed-methods research
Diversity in the workplace is perhaps one of the most critical challenges for human resource management (HRM) (Dressler, 2000; Pfau & Kay, 2002). Part of that diversity is age, and a number of HRM practices should be carefully designed to accommodate elderly employment. Age discrimination must be minimized. Restructuring job elements, such as part-time opportunities, flexible working hours, and adjusted benefits, will make work more attractive to elderly workers. Therefore, recruiters and interviewers must be attuned those concerns. The positive perception of the job attitudes and work-related abilities of elderly workers must be drawn upon. Negative stereotypes should not be allowed to impede the career opportunities of elderly workers. Both the moral and legal concerns of professional HRM must be taken into account (Elliott, 1995). It is essential to identify human resource (HR) policies and practices concerning knowledge transfer from the elderly to the next generation. Redesigning jobs and career paths is a core strategy for retaining elderly workers and providing an environment for knowledge transfer (Calo, 2008).

Considering the situation of elderly employment in Thailand, an employment survey revealed that 4.02 million elderly people aged 60 and over are still working. These workers are, however, concentrated in the agricultural sector (National Statistical Office, 2016). This situation leaves room for the expansion of elderly employment in the industrial sector in Thailand, particularly in the automotive industry, which is expected to be the “Detroit of Asia” (Ministry of Industry, Thailand, 2012). This industry has a highly efficient, skilled, and affordable labour pool that is one of the most skilled and best trained among ASEAN countries (Thailand Board of Investment, 2016).

The retirement age in automotive companies varies between 55 and 60 years of age, and some employees who are close to retirement will become elderly employees in the near future. Their tacit knowledge, including their skills and experience, is valuable for companies and for the country. Therefore, the idea of maintaining ageing workforces to work in the company after their retirement is a possible avenue. This study focuses on the elderly who have the potential to return to employment after their retirement.

Currently, research on elderly employment in Thailand remains limited. Empirical evidence, particularly in the Thai context, is required for both academic and practical purposes. This study is pioneering in this field of research. The research findings can also serve as credible information for decision making regarding whether to employ elderly employees in the Thai automobile industry. In addition, the government is considering drafting an old-age employment act; thus, the findings of this research can also be used to support that regulatory process.

LITERATURE REVIEW

Many scholars have agreed that elderly people can work longer (Kluge & Krings, 2008; McKinno, 2010; Morrow-Howell & Wang, 2013; Organization for Economic Co-operation and Development, 2006). Ageing countries, such as Japan, the United States of America, and
European Union member countries, promote the employment of their ageing workforce (Rix, 2005). The possibilities of employment, however, vary with different types of industries and industrial regions (World Health Organization, 1955).

There is an increasing number of organizations employing elderly employees, and some have seen considerable success when they have actively recruited elderly workers (Choo, 1999). The size of the labour pool can be increased by bringing back retired employees. The advantages of attracting elderly employees back into the labour market should be explored (Elliott, 1995). The factors that may convince elderly employees to return to employment are their individual attributes, such as their age and good health, along with attractive working conditions (Kim & Feldman, 2000; Wang et al., 2008). On the supply side, there is an opportunity for older people to stay economically active and thereby socially included (Roberts, 2006). Empirical evidence reveals that there is a relationship between elderly workers’ motivation, preferences, and ability to extend their working career (Jones & McIntosh, 2010). It has also been shown that the share of workers willing to extend their working career is increasing (Von Bonsdorff et al., 2009).

One crucial aspect of elderly employment that organizations also need to be aware of is that the elderly intend to work according to their own terms and conditions, not the employers’, which is seen as a consequence of the psychological contract of secure employment having been broken or jeopardized (Banks, 1996; Braun, 1997; Kennedy, 1998; Kets de Vries, 1994 cited in Choo, 1999). The elderly’s perceptions of the relationship between themselves and their employer have been altered. A preferable work context for elderly workers includes respect, dignity, and appreciation for a lifetime of work (Cohen, 1995 cited in Choo, 1999). This means that elderly employees are differently motivated than they were when they were young. Therefore, the jobs and the career path for elderly employees need to be modified. In accordance with that idea, HR functions themselves must be changed by developing a new set of competencies in order to conduct HRM efficiently for the elderly (Calo, 2008).

The World Health Organization (1955, p. 595) explained the characteristics of elderly employment as follows:

Not every old person is fit for employment, and consequently, employment agencies must reserve the right of selection. Retirement at the customary age with, if desired, re-employment for defined periods seems to offer the best method of employing old people, avoiding a damaging loss of dignity and the blocking of promotion of younger people.

This study defined elderly employment as the employment of retirees from automotive companies who want to continue working after retirement and meet the demands of automotive companies through a process of job matching.

The employment of elderly employees has been applied in many ageing countries, but it is in the initial stages in the Thai context, particularly in the automotive industry. Therefore, the research objective was to study the
RESEARCH METHOD

A mixed-method was utilized in this research by employing a sequential exploratory strategy. The first step was the collection and analysis of qualitative data during the first phase of research, followed by the collection and analysis of quantitative data in the second phase, which built on the results of the initial quantitative results (Creswell, 2003). Figure 1 presents the sequential exploratory strategy for this study. Details are presented step-by-step as follows.

Qualitative Research Method

This research is based on a constructivist methodology; a grounded theory strategy was also utilized. This strategy is suitable for “discovering theories, concepts, hypotheses, and propositions directly from data” (Taylor & Bogdan, 1984, p. 126) that are “grounded in the view of participants in a study” (Creswell, 2003, p. 14). As Glaser and Strauss (cited in Urquhart, 2013) suggested, when investigating similar concepts, the maximized differences of target groups can be used to develop fundamental uniformities in the research findings. Thus, four groups of stakeholders involved in elderly employment participated in this study. The groups of stakeholders were elderly employees, employers or HR managers, government officials whose work involves the employment of the elderly, and academics who have conducted studies related to this topic.

An interview guide was designed using the Patton (1990) and Joungtrakul (2010) approach. Then, the instrument was reviewed and approved by 5 experts. In addition, because the researchers were the instruments of data collection, they enhanced their interview skills by conducting practise interviews with 4 people before collecting data.

Using the theoretical sampling method, only those directly involved or that are responsible for issues relevant to elderly employment were selected as key informants in this study. Purposive sampling was then used to select the first key informant to be interviewed; this first informant was a representative of the Department of Employment at the Ministry of Labour. After that, by applying the snowballing technique, the first key informant suggested the next key informant for interviewing.

Data collection and data analysis were
carried out simultaneously, and data were managed using Atlas-ti software. After the interview sessions, transcripts were produced and then transferred to the software. The data were analysed using the Glaserian approach (Glaser, 1978), starting with open coding, which attaches initial labels to the data. Then, selective coding was used to develop core categories by grouping together initial codes that share central features or characteristics with one another. This approach was carried out until theoretical saturation, which is the point at which no additional data were found, was reached (Urquhart, 2013). In this study, saturation occurred after 32 interviews. Finally, an explanatory framework of elderly employment for the Thai automotive industry was constructed with identified, refined and integrated categories.

An audit trail was established at the early stages of this research to ensure the rigor of this study. The researcher’s activities and information were recorded in detail from the research proposal to the completion of the study. The information on the various perspectives of the people interviewed was compared and cross-checked for consistency. Member checking was conducted by taking the research results back to some key informants in order to test the accuracy of their answers. In addition, the research ethics of this study were approved by the Research Ethical Committee of Burapha University.

**Data Analysis in Mixed Methods Research**

Because this study employed a sequential approach, the approach of instrument development was then utilized. This method can be accomplished by using themes and specific statements from the initial qualitative data as the basis for specific items in the survey questionnaire. Instrument development is followed by validating the instrument with a large sample that is representative of a population (Creswell, 2003). Thus, the elderly employment model in the Thai automotive industry identified by the qualitative research was validated with a quantitative research method.

**Quantitative Research Method**

The population in this phase was categorized into two groups: first, 582 HR managers that had worked for companies that were members of the Thailand Automotive Institute and, second, all elderly employees in those companies that will retire within the next 5 years after the study, or from 2016-2020. This 5-year range was derived from the findings in the qualitative part of the study. Informants had claimed that employees who have only 5 years left before retirement tended to work until then. The total number of people in this group was unknown because there are no recorded data on the issue. Thus, the plan was to study the whole population of the Thai Automotive Industry Association by sending the questionnaire to all 582 companies.

The questionnaire was designed using a 4-point scale in order to avoid the common tendency towards choosing the answer in the middle of the range (Bendig, 1954; Cronbach, 1950), where 1 was equal to strongly disagree and 4 was equal to strongly agree. The content validity was approved by 5 experts; the experts included both academics and HR professionals. The index of item objective congruence (IOC) scores ranged from 0.60-1.00. In
Table 1. Themes, core categories, and examples of initial codes

| Theme                          | Core Category                      | Examples of initial codes and quotations |
|-------------------------------|------------------------------------|----------------------------------------|
| 1. Approach to Elderly        | Qualifications of the elderly      | Healthy, competent, good attitude, and willingness to work |
| employment (EEA)               | (EEA1)                             | “First, the elderly workers must be in good health so that they will not burden the company. If they are not strong enough, their absenteeism will affect the company’s performance.” |
|                               |                                    | “It depends on their willingness to work. Some want to [work], some do not want to [work].” |
|                               | Job characteristics                | Healthy, competent, good attitude, and willingness to work |
|                               | (EEA2)                             | “Same work…the work that we have done before. Using our experience, we know how to do it very well.” |
|                               |                                    | “…Work that is not physically demanding…work that does not strain the eyes.” |
|                               | Appropriate job assignments        | Healthy, competent, good attitude, and willingness to work |
|                               | (EEA3)                             | “Same work…the work that we have done before. Using our experience, we know how to do it very well.” |
|                               |                                    | “…Work that is not physically demanding…work that does not strain the eyes.” |
|                               | Recruitment and selection          | Internal recruitment, health checks, a performance record, interviews, and work testing |
|                               | (EEA4)                             | “Internal recruitment is better because they understand the company’s context very well.” |
|                               |                                    | “A health check is required…Doctors will determine whether they can work or not…Other selection methods can be those that are usually applied, e.g., interviewing and testing.” |
|                               | Work hours and hiring contracts    | By mutual agreement and yearly contract |
|                               | (EEA5)                             | “Based on the negotiation, at the beginning phase of ageing, they can work full time. After that, they should work part time.” |
|                               |                                    | “…contract year-by-year [should be made] until the elderly workers do not want to work.” |
|                               | Compensation and fringe benefits   | By mutual agreement and negotiation |
|                               | (EEA6)                             | “Compensation is based on their job assignment…However, details of the employment must be discussed and agreement should be made between the two parties.” |
Table 1. (Cont.)

| Theme | Core Category | Examples of initial codes and quotations |
|-------|---------------|------------------------------------------|
| 2. Elderly employment preparation (EEP) | Skill development (EEP1) | Re-training, technical skill, and diversity in work skills Quote: “Training is another issue that must be prepared…” “If they cannot develop skills and knowledge in advanced technologies, they may not qualify to work in a modern environment” |
| | Conducting pilot projects (EEP2) | Pilot project and voluntary companies Quote: “…a pilot project should be implemented in order to learn about both success factors and problems with elderly employment.” “Start with a pilot project in volunteer companies.” |
| | Preparation for occupational health (EEP3) | Occupational health, ergonomics, and a friendly and safe work environment Quote: “We prepare for the future, especially in occupational health. Ergonomics is quite new for us and must be prepared now so that we can have healthy workers in the future.” |
| | Researching (EEP4) | Research, survey, and labour data Quote: “Research and empirical data are also required to support the policy.” “Two crucial issues; the first one is data on elderly workers who prefer to work…The second is the data of job vacancies that show there is demand for employing elderly workers. In sum, we need data on both the demand and supply sides.” |
| | Elderly employment centre (EEP5) | Coordination agency and job matching organization Quote: “Establishing a central agency to take responsibility for elderly employing is required. This agency will manage and facilitate both the elderly workers and the companies.” |
| | Related legal revisions (EEP6) | Laws and regulations and fair treatment Quote: “There must be a clear policy in this aspect. Laws and regulations should be revised in order to support and protect elderly workers’ “Rules and regulations must be revised to create opportunities for elderly protection.” |

The pilot test, 30 HR managers and 30 elderly employees in a similar industry were asked about the reliability of the questionnaire. Cronbach’s alpha was 0.89 and 0.90 in the group of HR managers and elderly employees, respectively. Questionnaires were distributed via postal mail to all 582 companies. A total of 308 were returned. Confirmatory factor analysis (CFA) was used to validate the elderly employment model in the Thai automotive industry.

RESULTS AND DISCUSSION

The interviews with 32 key informants revealed that elderly employment
Table 1. (Cont.)

| Theme                                      | Core Category         | Examples of initial codes and quotations                                                                 |
|--------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------------|
| 3. Key success factors for elderly employment (KSF) | Collaboration         | Quotation: “…collaboration from companies is a key success factor in employing elderly workers.”  
|                                            | (KSF1)                | “There are so many government agencies involved in this issue, and they should support each other. Coordination among these agencies is required.”  
|                                            | Attitudes towards the elderly (KSF2) | Quotation:  
|                                            |                        | “According to the medical advancement, people live longer and healthier. As a result, they can work longer. Do not think that they cannot [work].”  
|                                            | The willingness to work on the part of the elderly (KSF3) | Quotation:  
|                                            |                        | “According to the medical advancement, people live longer and healthier. As a result, they can work longer. Do not think that they cannot [work].”  
|                                            | Budget allocation (KSF4) | Quote:  
|                                            |                        | “The government should support elderly employment. It can be done in the form of budget allocations and other non-monetary encouragement.”  
|                                            |                        | “At the beginning of a study and pilot project a budget is required.”  
|                                            | Laws and regulations (KSF5) | Quote:  
|                                            |                        | “At the first stage, law enforcement is not a choice. Encouraging companies to employ elderly workers is more reasonable…let them do it voluntarily first… Law enforcement should be initiated after we have enough information and learn about the positive and negative impacts to companies taking part voluntarily.”  
|                                            | Government policy (KSF6) | Quote:  
|                                            |                        | “There must be a clear policy regarding this.”  
|                                            |                        | “To motivate more companies to hire this group of people, the government should provide incentives, for example, tax reductions and employment awards.”  

was a new phenomenon in this industry. Notably, the four groups of stakeholders in this study had similar opinions regarding elderly employment. The findings indicate that the concept of elderly employment in the automotive industry does not focus on expanding the retirement age but on a basic foundation of job matching. This approach is used because some elderly employees may not want to work longer and because some companies may not want to be burdened with the high cost of hiring this group of people. Consequently, the findings revealed that employment will occur when both parties are willing. Therefore, career opportunities are
possible only when there is job matching between the employee and the employer (Sadangharn, 2016).

Based on the Glaserian approach, selective coding was used to develop 18 core categories. Theoretical saturation was then reached and 3 themes emerged. Accordingly, the characteristics of elderly employment in the Thai automotive industry are comprised of (1) approaches to elderly employment, (2) elderly employment preparation and (3) key success factors for elderly employment. A detailed analysis is shown in Table 1.

During the qualitative research, the elderly employment model was identified as EEA, EEP, and KSF. This model was then validated by the quantitative research method. Three hundred and eight questionnaires were returned: 147 respondents were HR managers, and 161 were elderly employees. When asking for their opinion concerning elderly employment, 278 (90.3%) of the total respondents approved of elderly employment, while only 30 (9.7%) disagreed. It was also noted that more elderly workers (n=152, 94.4%) agreed with the concept of the elderly employment model than HR managers (n=126, 85.7%). Regarding the elderly employment model in the Thai automotive industry, it was found that there are inter-correlations among the EEA, EEP, and KSF. The Pearson correlation coefficient \( r \) for the EEA and EEP was 0.75; for the EEP and KSF, it was 0.69; and for the EEA and KSF, it was 0.54. This result indicates that there is a strong positive association among the themes that emerged in the elderly employment model.

\[
\chi^2 = 104.93 \quad df = 97 \quad p = 0.27 \quad RMSEA = 0.01 \quad GFI = 0.97 \quad AGFI = 0.93 \quad CFI = 1.00
\]

*p < 0.05

Figure 2. Confirmatory factor analysis of the elderly employment model
To validate the elderly employment model in the Thai automotive industry, confirmatory factor analysis (CFA) was applied, and the results are presented in Figure 2. The specific fit indices were examined, and as Kline (2010) suggested, the goodness of fit of the proposed model using CFA analysis can be evaluated using the chi-square ($\chi^2$) value, which should be small and significant. In the elderly employment model, the chi-square goodness of fit statistic was 104.93; the degree of freedom was 97 ($p=0.27$). This significant chi-square indicates that the elderly employment model reflected the pattern of covariance confined within the raw data. The good fit of the model was also established from the value of the RMSEA; in the elderly employment model, it was 0.01, which is in accordance with Diamantopoulos and Siguaw’s (2000) suggestion of less than 0.05. Moreover, the GFI value of 0.97 and the AGFI value of 0.93 in the elderly employment model met the criteria of 0.9 that Arbuckle and Wothke (1999) claimed indicates a good fit. Additionally, Bentler (1990) argued that the CFI value is the ideal index to recognize the norm fit index and that it ought to be larger than 0.90; it was 1.00 in the elderly employment model. Thus, it was concluded that the elderly employment model in the Thai automotive industry is a good fit.

The findings in this research confirm the results of the New Zealand State Services Commission (2004 cited in McKinnon, 2010). The Commission suggested that an active ageing strategy can be secured if the potential of elderly employees is maximized, flexible work arrangements are enabled, compulsory retirement ages are abolished, a comprehensive health and safety framework is developed, career development and planning is implemented, and knowledge transfer from older to younger workers is involved. Therefore, part-time work or flexible work hours is suggested. In sum, HR initiatives for elderly employment must be reviewed and redesigned in accordance with the ideas of McKinnon (2010). Work contracts, compensation, and fringe benefits should be negotiated since each job depends on the context of an agreement between the elderly worker and the employer.

As revealed in the present study, appropriate job assignments should be suited to the individuals’ skills and knowledge, and work that is physically demanding is not recommended. Because of their experience and tacit knowledge, active jobs, namely, consulting, teaching, and supervising, are recommended. A passive job, office work, for example, is another choice for elderly employees, which is confirmed by the study of Raksathap, Kangwalpornsiri, and Intrarawisert (2010). Due to their work experience and their understanding of organizational culture, elderly employees are ready to resume their work without any adaptation being required. That seems to be a win-win solution for both the elderly employees and the employers. Elderly employees can do a job that they are familiar with, while the employer can gain immediate outputs without any orientation or training being required.

Occupational health and safety for elderly workers are issues to be considered with regards to elderly employment. As Rix (2005) stated, companies should pay attention to health and wellness programmes not only for elderly employees but also
for all age groups because they can enhance health status and performance. Ergonomic programmes can produce the same result and can lead to cost savings for employers. The ergonomics issue was also raised in this study; creating a friendly work environment for elderly workers was suggested along with planning for improved ergonomics. Thus, elderly employment requires that HR people understand the nature of this workforce. Revising HR practices by searching for an approach to career development for ageing employees is currently a challenge for HR practitioners.

Another great concern are negative attitudes towards elderly people, which lead to age discrimination (Cheung, Kam and Man-hung Ngan, 2011; Chiu, Chan, Snape and Redman, 2001; Riach, 2007; Sadangharn, 2016). As the Stanford Centre on Longevity (2013) has argued, the strong points in favour of hiring elderly employees are their great experience, visionary approach, and tacit knowledge. However, because of their age, elderly employees are perceived as being incapable of adapting to technological and organizational change; furthermore, there is the perception that the cost of their employment is high and that they exhibit lower productivity, as was also observed by the Organization for Economic Cooperation and Development (2006) and Morrow-Howell and Greenfield (2010). Moreover, Kanchanachitra, Jarassit and Kanchanachitra (2012) reported that the elderly are seen as having poor health and being too incompetent to work. However, the same study also indicated that the health factor did not affect the work opportunities for older male workers but it did affect the opportunities for older female workers. These negative perceptions regarding the productivity of elderly workers are contrasted by the work of Padula et al. (2013), which indicated that ability to work and physical functioning did not significantly differ between older and younger workers. These authors also concluded that “the physical functional capacity of younger and older workers was similar with regard to gait speed, muscle strength, and the physical functioning of their legs” (Padula et al., 2013, p. 385). These findings suggest that ageism and the negative perceptions of elderly employees still exist despite the fact that they are able to work effectively.

This observation leads to the solution offered by Prasartkul, Chuanwan and Thianlai (2012), who suggest that the Thai government and society should have a public policy fostering a reduction in ageism through awareness building. Soonthornchawagan and Cintakulchai (2009) also revealed that there are laws, regulations, and attitudes that encourage age discrimination that need to be changed. The findings of this study support this solution. It is the same lesson learned from other ageing countries, for example, Japan, Singapore, the United Kingdom, and France—where the government plays a crucial role in launching laws or regulations to promote elderly employment.

Elderly employment is inevitable. This employment should be encouraged not only because of the pressure from an ageing society but also because of the potential of the elderly themselves (Sadangharn, 2016). Thus, it is possible to employ elderly employees in the Thai automotive industry. This employment is possible because there is a supply and demand for it. Lu, Kao, and Hsieh (2011) revealed that employers wanted to hire elderly employees and that
some elderly employees also wanted to work. There are many reasons behind this finding, including economic reasons (Soonthorndhada 2011; Soonthornchawagan & Cintakulchai 2009). Apart from that, the factors that help elderly employees in their employment are individual attributes such as age and good health, along with attractive working conditions (Kim & Feldman, 2000; Wang et al., 2008). Thus, it seems that elderly employment is a current trend for ageing countries. It is difficult to avoid this situation since an increasing percentage of the world population is elderly.

CONCLUSION

Elderly employment varies from case to case and should be considered on an individual basis with the agreement of employers and elderly employees. It is time to think about elderly employment, which is bound to increase in the future. We should be prepared for it in advance.

Re-designing HR practices for elderly employment is recommended. Job assignments should be the same as those elderly employees performed before retirement in order to allow them to utilize their skills and experiences at work. Internal recruitment and selection are suggested since the elderly within companies can promptly resume their work after retirement. Re-training to update the skills and knowledge of the elderly who will retire in the near future should be addressed. In addition, the work contracts for each elderly employee may not be the same since it will depend on the mutual agreement of the employer and employee in terms of working hours, compensation and fringe benefits. Thus, flexible work contracts and practices are required.

The workplace context for elderly employment is also crucial. Occupational safety and health must be prepared. It is suggested that a friendly and safe work environment that promotes and maintains good physical and mental health, prevents harm at work, and protects elderly employees from danger at work be established. Additionally, information should be disseminated concerning elderly employment to promote a positive attitude towards elderly employees.

The government also has to play a vital role in the process of increasing elderly employment. According to the research results, collaboration between the government and automotive companies is a key success factor for elderly employment. Thus, a formal coordination mechanism for elderly employment should be established in the form of an elderly employment committee or elderly employment centre. This proposed committee or centre would be required to have representatives from the government sector, automotive companies, and elderly employees. It is also suggested that this centre implement pilot projects with a focus on providing career opportunities for elderly employees. The government also needs to support elderly employment by revising relevant laws and regulations such as concerning retirement age, pension fund, and anti-age discrimination.

Academically, research on the supply and demand of the ageing workforce is suggested. The evaluation of the elderly employment pilot project, as suggested earlier, is required. Furthermore, a study of the advantages and consequences of elderly employment is suggested.
ACKNOWLEDGEMENTS

This research was funded by the Thailand Research Fund, Office of the Higher Education Commission, and the Faculty of Management and Tourism, Burapha University. I would like to express my great appreciation for their valuable sponsorship.

Arbuckle, J. & Wothke, W. (1999). AMOS 4.0 user’s guide. Chicago: Smallwaters Corporation, Inc.

Bentler, P.M. (1990). Comparative fit indexes in structural models. Psychological Bulletin, 107 (2), 238-46.

Calo, T. J. (2008). Talent management in the era of the aging workforce: the critical role of knowledge transfer. Public Personnel Management, 37(4), 403-416.

Chiu, C.K., Chan, A.W., Snape., & Redman, T. (2001). Age stereotype and discriminatory attitude toward older workers: an east-west comparison. Human Relations, 54(5), 629–661.

Cheung, C., Kam, P.K., & Man-hung Ngn, R. (2011). Age discrimination in the labor market from the perspectives of employers and older workers. International Social Work, 54(1), 118–136.

Choo, T. E. (1999). The aging workforce: some implications, strategies and policy considerations for human resource managers. Asia Pacific of Human Resource, 37(2), 60–75.

Creswell, J. W. (2003). Research design: qualitative, quantitative, and mixed methods approaches. 2nd edition. Thousand Oaks: Sage Publications.

Diamantopoulos, A. and Siguaw, J.A. (2000), Introducing LISREL. London: Sage Publications.

Dressler, G. (2000). Human resource management. Upper Saddle River, NJ: PrenticeHall.

Elliott, R. H. (1995). Human Resource Management’s role in the future aging of the workforce. Review of Public Personal Administration, 15(2), 6–17.

Glaser, B., (1978). Theoretical Sensitivity. Sociology Press, Mill Valley, CA.

Jones, D. A. & McIntosh, B.R. (2010). Organizational and occupational commitment in relation to bridge employment and retirement intentions. Journal of Vocational Behavior, 77(2), 290–303.

Joungtrakul, J. (2010). Qualitative research: A tool for knowledge creation for national development. Bangkok: Business Law Centre International Company Limited.
Kim, S., & Feldman, D.C. (2000). Working in retirement: The antecedents of bridge employment and its consequences for quality of life in retirement. Academy of Management Journal, 43(6), 1195–1210.

Kline, R. B. (2010). Principles and practice of structural equation modeling (3rd ed.). New York, NY: Guilford Press.

Klude, A., & Krings, F. (2008). Attitudes toward older workers and human resource practice. Swiss Journal of Psychology, 67(1), 61–64.

Lu, L., Kao, S., & Hsieh, Y. (2011). Attitudes towards older people and managers intention to hire older workers: a Taiwanese study. Educational Gerontology, 37(10), 835–853.

McKinnon, R. (2010). An ageing workforce and strategic human resource management: staffing challenges for social security administrations. International Social Security Review, 63 (3-4), 91–113.

Ministry of Industry, Thailand (2012). Master Plan for Automotive Industry 2012 – 2016. Ministry of Industry and Thai Automotive Institute.

Morrow-Howell, N., & Greenfield J.C. (2010). Productive engagement of older Americans. China Journal of Social Work, 3(2), 153–164.

Morrow-Howell, N. & Wang, Y. (2013). Productive engagement of older adults: elements of a cross-cultural research agenda. Ageing International, 38(2), 159–170.

National Statistical Office. (2016). Summary of ageing workforce in Thailand 2016. Bangkok: National Statistical Office.

Organization for Economic Co-operation and Development: OECD. (2006). Aging and employment policies: live longer, work longer. Paris: OECD Publication.

Padula, R. S., Comper, M.L., Moraes, S. A., Sabbagh, Pagliato Junior, W., & Perracini M. R. (2013). The work ability index and functional capacity among older workers. Brazilian Journal of Physical of Therapy, 1.17(4), 382-391.

Patton, M. Q. (1990). Qualitative evaluation and research method, 2nd ed. London: Sage.

Pfau, B. N., & Kay, I.T. (2002). The human capital edge: 21 people management practices your company must implement (or avoid) to maximize shareholder value. New Jersey: McGraw Hill.

Prasartkul, P., Chuanwan, S. & Thianlai, K. (2012). Elderly: inner people to be marginalized. Population and Social 2012. Bangkok: Mahidol University.
Sadangharn, P. (2016). Age discrimination and the opportunities for elderly employment: the case of the Thai automotive industry. The International Journal of Aging and Society, 6 (3), 17–27.

Soonthornchawagan, N. & Cintakulchai, S. (2009). Job opportunities creation for the elderly. Bangkok: Foundation of Thai Gerontology Research and Development Institute.

Soonthorndhada, K. (2011). Economic value of Thai elderly. Population and Social 2011. Bangkok: Mahidol University.

Raksathap, S., Kangwalpornsiri, K. & Intrarawisert, N. (2010) Final report: the project of suitable occupation and earned income opportunities in accordance with older workers. Bangkok: Research and Development Institute, Ramkhamhaeng University.

Riach, K. (2007). Othering older worker identity in recruitment. Human Relations, 60(11), 1701–1726.

Rix, S. (2005). Rethinking the role of older workers: promoting older workers employment in Europe and Japan. Accessed April 2, 2017. assets.aarp.org/rgcenter/econ/ib77_workers.pdf.

Roberts, I. (2006). Taking age out of the workplace: putting older workers back in?. Work Employment and Society, 20(1), 67–86.

Stanford Centre on Longevity. (2013). Adapting to an aging workforce. Accessed April 2, 2017. http://longevity3.stanford.edu/agingworkforce/abstract/.

Taylor, S. J. & Bogdan, R. (1984). Introduction to qualitative research methods: the search for meanings, 2nd., Wiley, New York.

Thailand Broad of Investment. (2016). Thailand: global green automotive production base. Thailand Broad of Investment, Bangkok.

Urquhart, C. (2013). Grounded theory for qualitative Research. Los Angles, London, New Delhi: Sage.

Von Bonsdorff, M.E., Shultz, K.S., Leskinen, E., & Tansky, J. (2009). The choice between retirement and bridge employment: a continuity theory and life course perspective. International Journal of Aging and Human Development, 69(2), 79–100.

Wang M, Zhan Y, Liu S, & Shultz KS. (2008). Antecedents of bridge employment: a longitudinal investigation. Journal of Applied Psychology, 93(4), 18–830.

World Health Organization. (1955). The employment of elderly persons. Bulletin of the World Health Organization, 13(4), 595–603.
Survey Questionnaire

Part 1: General Information
Please provide information about yourself. Use a check mark ✓ in the box that most closely describes yourself.

1. Gender
   ( ) 1. Male
   ( ) 2. Female

2. Education
   ( ) 1. Lower than a Bachelor’s Degree
   ( ) 2. Bachelor’s Degree or equivalent
   ( ) 3. Master’s Degree
   ( ) 4. Doctoral Degree

3. Work experience in your current company
   ( ) 1. Less than 5 years
   ( ) 2. 5 – 10 years
   ( ) 3. 10 – 15 years
   ( ) 4. Longer than 15 years

4. Your Position
   ( ) 1. Elderly employee
   ( ) 2. HR manager

Part 2: Opinion about the characteristics of elderly employment
Please make a check mark ✓ in the place that reflects your opinion in accordance with the following scale:

4  Strongly Agree
3  Agree
2  Disagree
1  Strongly Disagree

| Question                                                                 | 4 | 3 | 2 | 1 |
|-------------------------------------------------------------------------|---|---|---|---|
| **Opinions about the characteristics of work for elderly employees**    |   |   |   |   |
| 1. The same work that they used to do and that uses their experience    |   |   |   |   |
| 2. Work that does not demand physical strength                           |   |   |   |   |
| 3. Work that does not strain the eyes                                   |   |   |   |   |
| 4. Work that does not expose the employee to loud noise                 |   |   |   |   |
| 5. Work that is not risky                                               |   |   |   |   |
| **Opinions about the type of work for elderly employees**               |   |   |   |   |
| 6. In the case of executives, they should be hired as consultants to advise the company |   |   |   |   |
| 7. In the case of executives, the employment as executives should be continued |   |   |   |   |
| 8. In the case of specialists, they should be hired as trainers         |   |   |   |   |
| 9. In the case of staff, they could be hired as supervisors             |   |   |   |   |
| 10. In the case of staff, they could be hired to do paperwork in the office |   |   |   |   |
| **Opinions about the qualifications of the elderly**                    |   |   |   |   |
| 11. Are healthy and can continue to work                                |   |   |   |   |
| 12. Are knowledgeable and skilled                                       |   |   |   |   |
| 13. Have work experience                                                |   |   |   |   |
| 14. Have a good attitude towards the company                            |   |   |   |   |
| 15. Are willing to continue working                                     |   |   |   |   |
| Question                                                                 | 4 | 3 | 2 | 1 |
|-------------------------------------------------------------------------|---|---|---|---|
| **Opinions about recruitment and selection**                            |   |   |   |   |
| 1. Selection based on a health examination                              |   |   |   |   |
| 1. Selection based on an evaluation of past performance                 |   |   |   |   |
| 2. Selection based on an interview                                      |   |   |   |   |
| 3. Selection based on a test of skills                                  |   |   |   |   |
| 4. Selection based on the opinion of the executive                      |   |   |   |   |
| **Opinions about working hours and employment contracts**               |   |   |   |   |
| 5. 55-60-year-old employees should work full time                       |   |   |   |   |
| 6. 61-65-year-old employees should work part time                       |   |   |   |   |
| 7. Employees 65 years and older should work part time                   |   |   |   |   |
| 8. Employment contracts should have a clearly defined time frame, e.g., a yearly contract or more depending on negotiation |   |   |   |   |
| **Opinions about remuneration and benefits**                            |   |   |   |   |
| 9. 55-60-year-old employees who can work full time should be            |   |   |   |   |
| compensated at the same rate as before retirement                       |   |   |   |   |
| 10. Employees 61 years and older should be compensated as per agreement |   |   |   |   |
| 11. 55-60-year-old employees who can work full time should receive the same benefits as other employees |   |   |   |   |
| 12. Employees 61 years and older should receive benefits as per agreement |   |   |   |   |
| **Opinions about preparations for the employment of the elderly**       |   |   |   |   |
| 13. Conduct research to accumulate information about the elderly        |   |   |   |   |
| 14. Prepare for occupational health and safety                          |   |   |   |   |
| 15. Initiate an elderly employment pilot project                         |   |   |   |   |
| 16. Improve working skills of elderly employees before retirement age   |   |   |   |   |
| 17. Establishment of an elderly employment centre                        |   |   |   |   |
| 18. Review related laws and regulations                                  |   |   |   |   |
| **Opinions about key factors affecting the success of elderly employment** |   |   |   |   |
| 19. Government policies that seriously consider elderly employment      |   |   |   |   |
| 20. Legislation of an elderly employment act                             |   |   |   |   |
| 21. Support by government budget                                         |   |   |   |   |
| 22. Government incentives for the private sector to employ elderly workers, such as tax deductions |   |   |   |   |
| 23. Awareness building to create positive attitudes towards the elderly  |   |   |   |   |
| 24. Outreach campaign on elderly employment                              |   |   |   |   |
| 25. Cooperation of all public and private parties involved              |   |   |   |   |

**Part 3:** Suggestions and other feedback

Thank you for answering the questionnaire