

Heading for Modern Construction Management: Recommendation for Employers

Robin Becker, Maike Eilers, Nane Roetmann, Manfred Helmus

Abstract—The shortage of junior staff in the construction industry is a problem that will be further exacerbated in the coming years by the retirement of the baby-boom generations (1955-1969) from employment. In addition, the current working conditions in the field of construction management are not attractive for young professionals. A survey of students as part of the paper revealed a desire for an increase in flexibility and an improved work-life balance in everyday working life. Students of civil engineering and architecture are basically interested in a career in construction management but have reservations due to the image of the profession and the current working conditions. A survey among experts from the construction industry, also as a part of the paper, shows that the profession can become more attractive. This report provides recommendations for action in the form of working modules to improve the working conditions of employees. If these are taken into account, graduates can be attracted to the profession of construction management, and existing staff can be retained more effectively. The aim of this report is to show incentives for employers to respond to the wishes and needs of their current and future employees to the extent that can be implemented.

Keywords—Modern construction management, construction industry, work modules, shortage of junior staff, sustainable personnel management, making construction management more attractive, working time model.

I. INITIAL ANALYSIS OF CONSTRUCTION MANAGEMENT

THE current working conditions in construction management are predominantly characterised by a steadily growing number of tasks to be managed in connection with the execution of construction work with continuously shorter execution periods. As a consequence, working weeks with far more than 50 hours and an unbalanced work-life balance result for the employees [1, p.94, 95]. Particularly against the background of the prevailing shortage of skilled workers [2, p.27] within the construction industry, these are not very attractive working conditions for potential junior staff, especially since their idea of a modern working life hardly corresponds to the existing reality. For tomorrow's executives, work-life balance and the recognition of a sense of purpose in their activities are paramount, so that monetary incentives alone are no longer sufficient to attract and retain employees. [3, p.10] Accordingly, there is an acute need for action by German construction companies to meet these wishes of future generations in order to attract new junior staff and retain existing staff.

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A. Profile of Construction Management

The construction industry has established itself as a stable labour market and as an instrument for coping with social challenges. The existing shortage of skilled workers in the construction industry is therefore an even greater problem in the wake of demographic change [4, p.2]. Despite the steadily increasing numbers of graduates in architecture and civil engineering, two out of three construction companies are unable to fill their vacancies in the field of construction management [as of 2021] [5, p.6]. Against this background, the current working conditions in construction management do not offer very attractive framework conditions for young, well-trained junior staff. Within society, the job description of construction management is associated with a lot of stress, few holidays, unregulated working hours and a poor work-life balance [6, p.26-28]. In view of this fact, it is important to survey the current status quo of employees and junior staff and to develop recommendations for action for companies to counteract the current trend.

B. Student Survey

A survey of students conducted by the University of Wuppertal in 2021 revealed the perceived unattractiveness of the professional field "Construction Management" on young professionals [7]. Personal development, flexibility in terms of time, work-life balance and the necessary digitization of the workplace and work processes were identified above all as conditions with the highest prioritization in the future career choice of the young professionals. Personal development opportunities in professional life are important for almost three quarters of the students, with later implementation also seen as a given in the field of construction management. Flexibility in terms of time is also perceived by three quarters of all graduates as important to very important in their later career choice. In contrast, the flexibility of the professional field of construction management is rated as low to very low by just under half of the students. The desire for flexible working hours was also emphasised when asked about ways to make construction management more attractive. 29 students explicitly called for an increase in the compatibility of the job with private life and see this as a main cause of the low attractiveness of the occupational field. A high to very high degree of digitalisation is prioritised by 75% of the students in their future professional life. In contrast, the progress of digital working methods in construction management is rated as only average. The construction industry as a whole is sometimes perceived as slightly positive when it comes to digitalisation. In summary, it was shown that the field of construction

management is unattractive for future graduates and that there is therefore an acute need for action on the part of the companies [1, S.100-103].

C. Results of Expert Interviews

Overall, the personal development opportunities for the profession of construction management were rated rather positively by the experts interviewed. These include promotion opportunities, further training, apprenticeships and the promotion of young talent, which are seen as a key priority by students in particular. The general level of digitalisation in the construction industry is perceived as rather negative by the respondents. According to the experts surveyed, home office and parental leave solutions can make the time of employees in construction management more flexible. The possibility of part-time work and job sharing is perceived negatively. The workload within construction management emerges as the biggest problem. About 80% of the surveyed construction managers stated that they work significantly more than the working hours agreed in their employment contract and in 90% of the cases the hours worked are not documented. According to the surveyed site managers, an improvement in the compatibility of family and work can be achieved primarily by adjusting capacity and reducing the workload of the construction site teams as well as by creating regionality on the construction sites. Basically, according to the experts, the profession is not attractive for young professionals and is difficult to reconcile with private life. In addition, it contains many different stressors due to a high workload with diverse areas of responsibility, with flexible working hours primarily causing overload instead of relief. In connection with the change in values of the next generation, the need for action on the part of companies is becoming even more acute. The experts interviewed include our practical partners from the associated research project Derichs&Konertz, Kondor Wessels, Gebäudemanagement der Stadt Wuppertal, Hülskens Wasserbau as well as Bauindustrie NRW and many more.

II. STRUCTURE AND METHODOLOGY

A four-stage methodological procedure is being implemented to develop an improvement in the working situation for skilled workers in construction management. The four stages are divided into the initial analysis, theoretical approach, development of a recommendation for action and its validation at construction companies. In the first stage, the conditions in construction management were first worked out using a literature research and applied as a basis for the online survey of students and the expert interviews. The results of the survey show the interface between the expectations and wishes of the students for the occupational field in contrast to the findings of the implementation possibilities from the expert interviews with construction managers, managing directors of construction companies and the attitude of the chambers and associations to the possibilities for improvement of the profession. In this way, the initial situation with the problem of recruiting young workers was shown. The next step is to develop a theoretical approach to solving the

problem. This is then formulated in a recommendation for action for employers to increase the attractiveness of construction management. The conclusion of the methodological procedure is the validation of the findings in practice. The methodical procedure is summarised in Fig. 1.

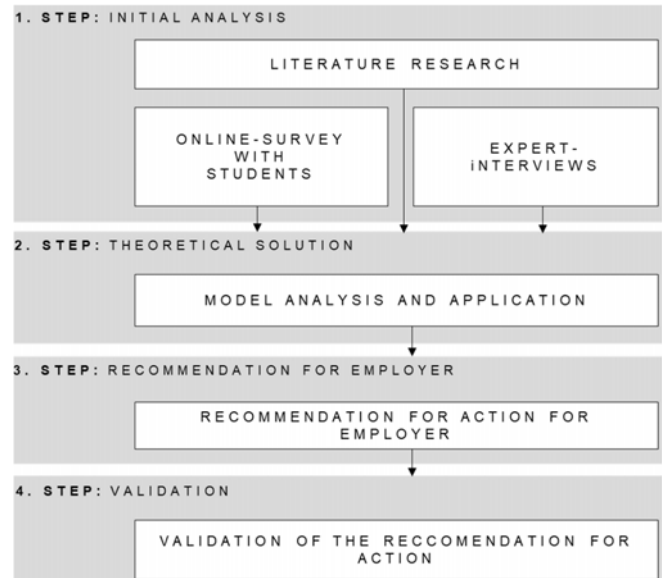


Fig. 1 Flow chart of the methodological approach

A. Theoretical Approach

In order to find a solution to the problem of the high workload in construction management and to fulfil the demand for junior staff, it is necessary for employers to create a balance. This balance is created through social reciprocity and mutual cooperative investment between employee and employer. The employee's efforts in construction management are to be balanced by rewards from the employer according to Siegrist [9]. The lack of this compensation causes "strong negative emotions and persistent stress reactions" which result in harmful effects on, for example, the employee's health and behaviours [8, p.2]. Rewards can be assigned to different incentive types. A distinction can be made here between remuneration, appreciation, career opportunities and, important for the following generations, increased flexibility through the choice of compensatory time off, changes in weekly working hours, choice of work location, etc. Following the Effort-Reward Imbalance Model (ERI-Model) [9], the necessary balance between efforts and rewards at the workplace for the employee is shown schematically in Fig. 2.

An imbalance is maintained, for example, as a result of over-commitment by the employee or an acceptance of prevailing working conditions [8, S.3].

In order to improve the balance of work in construction management, one solution is to explain recommendations for action in the form of work modules that offer great incentives for employees and a reward for their efforts in the occupational field. The various modules were developed as part of the ongoing research project "Modern Construction Management" [7] at the University of Wuppertal. Through the

individual modules, employers are shown possibilities that enable current and future skilled workers to increase flexibility and job satisfaction. The implementation of each individual module already requires an improvement of the current work situation in construction management.



Fig. 2 Schematic representation of the ERI-model [8, S.3]

III. RECOMMENDATION ON WORK MODULES FOR EMPLOYERS

The recommendation for action is divided into the modules of place of work, documentation of working time, duration of work, distribution of working time as well as paid and unpaid leaves, remuneration and corporate culture. The individual modules are briefly explained in this report, with a precise breakdown taking place within the framework of the ongoing research project. In addition, tips for implementation in the company are provided.

A. Module 'Place of Work'

The module 'place of work' describes possible solutions to improve the flexibility of the place of work of the employees within the construction management. Possible work locations are, for example, the construction site, the office, the home office or mobile working. Flexibilization is intended to increase the attractiveness of the occupational field and thus also that of the employer. Granting home office or mobile working also promotes the compatibility of family and work and self-determined action is strengthened [10, p.57, 58], [11, p.4, 5]. In addition to the increase in attractiveness for companies, other positive aspects can also be identified. In the medium term, the switch to a flexible workplace can save office rental space and general costs for the company as well as travel time and travel costs for the employee [11, p.4, 5]. Increased flexibility of employees results in increased satisfaction and an increase in personal motivation [12]. Operational activities can be carried out on the construction site, while administrative activities can be carried out independently of location. It is also possible for employees to attend private appointments, such as health-related appointments. The work module is to be agreed upon individually in the companies and, depending on the project, defined as between 1-5 working days per week, away from the first place of work. Fixed weekly and monthly quotas are also conceivable for employees to choose from. The work location module is limited to determining the local conditions, independent of the structuring and documentation of working time.

B. Module 'Working Time'

The flexibilization of the contractual working time in the field of activity of construction management is described by the working module 'working time'. In addition to the classic full-time or part-time models, the vario, invest, home and job-sharing models can be introduced. [13] While in classical part-time the hourly reduction of working time per working day is fixed, in part-time vario the reduction of hours can be flexibly distributed in the week, whereby, if necessary, fixed core working hours are set or even one working day is completely omitted [13]. Part-time invest offers employees the possibility to work variably beyond their agreed part-time and to use the accumulated quota in monetary or time units [13]. The home part-time model allows employees to work from home, although individual days can also be worked in the company [13]. Job sharing, also called couple part-time, means that two or more employees share a common workplace or full-time position [13]. The division of the duration, the location and the distribution of the working time takes place between them on their own responsibility. A prerequisite for the implementation of the working module working time is compliance with the legal provisions, in particular with the part-time and fixed-term employment Act [14]. Furthermore, the work tasks must be sensibly divisible. The high degree of personal responsibility and time autonomy of employees creates attractive employment opportunities, which can be particularly attractive for parents or for maintaining employment in the event of a reduction in hours [15, p.4]. This can also support self-responsible further education, for example through study. For companies, the introduction of part-time solutions offers the opportunity to attract and acquire female professionals and parents in particular [16, S.2, 3].

C. Module 'Distribution of Working Time'

The distribution of personal working time makes it possible to make rigid working hours more flexible. Possible forms are flexitime, functional time, trust-based working time and annual working time [17, p.91-105]. When choosing a flexitime model, employers decide independently on the location and distribution of their daily working time within the framework of company-defined limits. Criteria characterising this type of variability include the measurement of the flexitime framework, if any, the duration of core working time and the resulting flexitime margins. If fixed attendance frameworks do not match individual customer requirements, the employer defines a functional time for individual company departments, during which the respective department completes the tasks at hand and is available as a contact person for both internal and external customers. Another possibility is to set a fixed working time budget over a particularly long planning period [17, p.91-105]. As an option, instead of defining work performance by the time factor, it can be controlled by means of a results orientation. Trust-based working time is characterised by two essential core elements: the high degree of self-organisation of the employees and the waiving of working time documentation by the employer [18, p.14]. A prerequisite for the application of the working time

distribution module is written agreements on the duration of the time period, the flexitime framework, if any, and the duration of the notional normal working time. Largely sovereign work areas and compliance with legal regulations, such as the 'Working Hours Act' [19], among others, must also be taken into account. Possible advantages arise from the increase in flexibility, efficiency and productivity [18, p.111]. For the employee, there is also greater time sovereignty, the possibility to react flexibly to non-work commitments and the saving of time reserves for later use. In addition, the 'sitting out of working time' is avoided [20, S.70].

D. Module 'Paid and Unpaid Leaves'

A leave of absence or sabbatical allows employees to take time out after a particularly demanding project, for example. Time off can be paid or unpaid and allows for targeted recovery periods. A distinction can be made between unpaid and paid leave or parental leave. Unpaid leave is contractually agreed between the employer and the employee over a fixed full stop of time. During this time, the employee does not have to perform any work, but also does not receive any wages or continued salary payments. The main performance obligations of both parties to the contract are suspended. The insurance cover also expires after a waiting period of one month. The employee must therefore take out his/her own health insurance and, if necessary, pay into the pension insurance scheme voluntarily [21]. Paid leave is also agreed between the contracting parties for a fixed period. Here, the employee is released from his obligation to perform but continues to be paid. The amount of the final paid leave can be determined individually and the insurance obligations and coverage continue to exist [21, pp.76, 77], [22, pp.104-107]. Parental leave and holiday are treated as paid leaves of absence. All workers have a legal right to this type of leave, following the birth of a child. The entitlement to parental leave is for each parent until the child is three years old and can be for a period of up to 36 months. The maternity leave period is counted towards the parental leave, so it does not lead to an extension [23]. The advantages of a leave of absence are, on the one hand, the relief of employees who, for example, have been exposed to high efforts over long periods or, on the other hand, want to take time off for family obligations. Furthermore, the aim is to prevent downtime due to overwork, such as burn-out [24]. Overall, the performance of employees is maintained through longer recovery periods, which leads to increased motivation and satisfaction among employees [25, S.3].

E. Module 'Remuneration'

The remuneration module may include employee bonuses through monetary and non-monetary compensation schemes as additional rewards for commitment and company affiliation. Monetary forms of remuneration include bonuses, allowances and commissions. These can be distributed as additional remuneration during or after the successful completion of a project, among other things. Monetary remuneration can be based on the project volume, an internal

remuneration key or the contribution margin of the project. Another option is company-linked equity participation. Employees can be involved in the company through the purchase or distribution of a share and experience motivation through direct participation in the company's success. Company shareholdings can be structured in such a way that employees act as silent partners and only participate in the company's profits or, optionally, losses [26, p.31-46]. Alternatively, employees can be granted more far-reaching control and information rights as shareholders [26, p.40]. Employee loans can be used to provide capital to the company via a loan agreement and the employees can thus act as lenders [26, p.32]. The company pension is a form of supplementary pension. Here the employer takes out an additional life or pension insurance policy for the employee. Part of the salary is paid in tax-privileged together with an employee contribution [27]. Personnel development includes the employer's financing of additional further training opportunities for employees. This includes, for example, seminars of the Chamber of Industry and Commerce, scientific certificate courses, company-internal further training offers, soft-skill courses, further training offers of the professional associations as well as the financing of a part-time study [28, p.45]. Employers can also promote the health of employees through subsidies. The tax allowance for health promotion measures is 600.00 euros per year per employee [29, §3]. Companies have the choice of paying the subsidies directly to the employees or providing corresponding services themselves. Examples are the provision of a gym membership, bicycle leasing or ergonomic workplace design [28, p.47, 48]. A prerequisite for the application of the module is the definition of the offer and the limits of the forms of compensation. Transparent communication about the provision of the different forms of remuneration for all employees are purposeful for the corporate culture. It is advisable to have fixed regulations and employment contracts as well as monetary evaluations of the modules for the company's profitability analysis. The application of the building blocks of the remuneration module increases the attractiveness of the company; in particular, the appearance as a social employer and the increased identification of the employees through company shareholdings contribute to this [26, P.6], [28, P.90].

F. Module 'Working Time Documentation'

The module 'working time documentation' describes the exact recording of the hours worked by each employee. The working time is documented in particular with regard to the proof of plus and minus hours actually worked. These hours can then be accounted for using various approaches [20, p.218]. Short-term accounts aim for a reference and compensation period of up to one year. Employees are given the option of a flexible arrangement of their daily, weekly or even monthly working time. This form of working time accounts should be balanced as much as possible at the end of the respective period. In addition, there is the option of transferring the positive hourly balances to a long-term account. The aim here is to save over a long period of time,

which can then be used, for example, for an extended period of time off work or for early retirement (see also the work module 'Time Off'). It is important to find clear guidelines for the implementation of working time accounts and to define them internally. Among other things, the type of working time account, any upper limits for block time off and a maximum time credit are determined. If the accumulated working time is not balanced, a warning system in the form of a traffic light account can be introduced. Deviations in both directions are accepted up to a fixed limit until gradual restrictions take effect [20, p.218]. As an alternative to time compensation, the hours worked can then also be compensated monetarily [30, p.2]. As with flexitime, working time documentation in conjunction with working time accounts can increase employees' time sovereignty if the guard rails and rights of disposal are set accordingly [20, p.218]. For the company, working time accounts offer the advantage that overtime does not have to be paid directly, but is initially saved as an interest-free loan by the employee [30, p.2]. Expensive overtime is thus avoided. Overall, working time accounts result in the possibility of increased flexibility for both employees and employers [30, p.2].

G. Module 'Corporate Culture'

Basically, a distinction can be made between hierarchical or formal and open or informal corporate cultures. Hierarchical cultures mean fixed areas of responsibility and clear guidelines [31, p.194]. Open cultures include trust, appreciation, feedback, equality, open communication, teamwork, diversity management and retention management [32, p.89-103]. Clear corporate cultures can provide stability and orientation for employees. Positive consequences are satisfied employees, clear structures and an increase in the general well-being of the employees [32, p.99]. The prerequisite is a lived culture, superiors as cultural role models and meeting places. The principle "leadership is based on cooperation and not on competition" must be observed. The corporate culture is implemented through the formulation of the mission statement, mission, vision, strategy and the desired external presentation [33, p.5-8]. These determinations should be set by the company management as well as regularly updated.

H. Guidelines for Implementation

When implementing individual modules, the status quo of the offers in the company should first be recorded by the employer. The baseline situation can then serve as a measurement approach for assessing success when the new modules are introduced. The approaches can be job-related, such as through a job description, a company-wide compensation key or company-defined employee mobility. Of central importance in measuring success via the introduction of various modules, is the measurement data from employees via self-reporting. Here, regular employee interviews or online surveys of employees should be mentioned as a survey option. In addition, employees need binding guidelines that inform them about their rights and duties in connection with the new

working methods. These so-called company-internal "guard rails" should be understood as agile working aids that give employees security, define responsibilities and take current framework conditions into account. It must be ensured that the applied work modules apply equally to all employees and that there is no inequality.

IV. CONCLUSION AND OUTLOOK

The current working conditions are not attractive for future junior staff in construction management. This is shown by the survey conducted throughout Germany among students in 2021. Expert interviews from the construction management sector also underlined a low attractiveness of the occupational field. According to the results of the expert interviews conducted with management and chambers and associations, the construction industry is open to positive influences to improve the initial situation. According to the theoretical solution approach, a balance between the requirements and obligations of the employee must be rewarded accordingly by the employer. This rewarding can be done through different types of incentives. The developed work modules are to be seen as a recommendation for action for the employer. By pointing out solutions in the form of individual work modules, such as those concerning working hours or the place of work, the employer can increase its attractiveness for skilled workers and retain existing staff. The recommendation for action also aims to give employees more flexibility in their professional activities and to improve their working conditions. The implementation of each individual module already requires an improvement of the current work situation.

The extent to which the developed work modules can be implemented in practice is to be tested within the framework of a validation. This is done by introducing and testing partial aspects of the various modules at small and medium-sized construction companies. For this purpose, several of our practical partners have agreed to validate the developed models. Overall, the validation serves to draw conclusions and to identify opportunities and risks in connection with the implementation of individual models, in order to adapt them if necessary or to serve as a positive example for a whole sector. This demonstrates the practicability as well as the survey of changes in the work situation in the profession of construction management. Problems around implementation constraints between the individual modules can be surveyed.

REFERENCES

- [1] Arbeitsbereich Für Baumanagement, Baubetrieb Und Tunnelbau, Hg., Tagungsband zum 31. BBB-Assistent:innentreffen Innsbruck 2022. Studia Verlag, 2022.
- [2] „Bauwirtschaft-im-Zahlenbild_2020_final_Inhalt_verlinkt“. (Online). Verfügbar unter: https://www.bauindustrie.de/fileadmin/bauindustrie.de/Zahlen_Fakten/Bauwirtschaft-im-Zahlenbild/Bauwirtschaft-im-Zahlenbild_2020_final_Inhalt_verlinkt.pdf
- [3] Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, „Flexible Arbeitszeitmodelle - Überblick und Umsetzung“, 2017.
- [4] Bundesministerium für Arbeit und Soziales, „Fachkräftesicherung und -bindung“, 2015. (Online). Verfügbar unter: <https://www.bmas.de/SharedDocs/Downloads/DE/Publikationen/Forschungsberichte/f459-fachkraeftesicherung-und->

- bindung.pdf?_blob=publicationFile&v=1
- [5] Deutscher Industrie- und Handelskammertag, „DIHK-Report Fachkräfte 2021: Fachkräfteengpässe schon über Vorkrisenniveau“, Berlin Brüssel, Nov. 2021. (Online). Verfügbar unter: <https://www.dihk.de/resource/blob/61638/9bde58258a88d4fce8cda7e2ef300b9c/dihk-report-fachkraeftesicherung-2021-data.pdf>.
- [6] I. f. D. Allensbach, Das Image der deutschen Bauwirtschaft. (Online). Verfügbar unter: https://www.ifd-allensbach.de/fileadmin/studien/7250_Bauwirtschaft.pdf.
- [7] Lehr- und Forschungsgebiet Baubetrieb und Bauwirtschaft, „Moderne Bauleitung: Arbeitsmodelle zur Attraktivitätssteigerung der Bauleitung. Erhöhung der Frauenquote und der Vereinbarkeit von Familie und Beruf.“. Förderung: Forschungsinitiative Zukunft Bau des Bundesministeriums des Innern, für Bau und Heimat (BMI) durch das Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR) im Bundesamt für Bauwesen und Raumordnung (BBR), Bergische Universität Wuppertal, Wuppertal, 2023.
- [8] J. Siegrist, Effort-reward imbalance at work: Theory, measurement and evidence, 2012. (Online). Verfügbar unter: https://www.uniklinik-duesseldorf.de/fileadmin/fuer-patienten-und-besucher/kliniken-zentren-institute/institute/institut_fuer_medizinische_soziologie/dateien/eri/eri-website.pdf
- [9] J. Siegrist, „Adverse health effects of high-effort/low-reward conditions.“, US : Educational Publishing Foundation, Jg. 1996.
- [10] Homeoffice im Interessenkonflikt: Ergebnisbericht einer empirischen Studie, 2021. (Online). Verfügbar unter: <https://www.econstor.eu/bitstream/10419/250143/1/1761309978.pdf>
- [11] P. Grunau, K. Ruf, S. Steffes und S. Wolter, „Mobile Arbeitsformen aus Sicht von Betrieben und Beschäftigten: Homeoffice bietet Vorteile, hat aber auch Tücken“, Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung (IAB), IAB-Kurzbericht 11/2019, 2019. (Online). Verfügbar unter: <https://www.econstor.eu/handle/10419/216702>.
- [12] Arbeit im Homeoffice: Förderung der Arbeitsbereitschaft oder Einladung zum Faulenzen?, 2016. (Online). Verfügbar unter: <https://www.jstor.org/stable/26529924>
- [13] Bundesministerium für Soziales und Arbeit, Teilzeitmodelle. (Online). Verfügbar unter: <https://www.bmas.de/DE/Arbeit/Arbeitsrecht/Teilzeit-flexible-Arbeitszeit/Teilzeit/teilzeitmodelle.html>.
- [14] Teilzeit- und Befristungsgesetz (TzBfG), 2011. (Online). Verfügbar unter: <http://www.gesetze-im-internet.de/tzbfg/index.html>
- [15] S. Dörfner, Das Recht auf Teilzeit für Eltern: Top oder Flop? AUT; Wien, 2004. (Online). Verfügbar unter: <https://www.ssoar.info/ssoar/handle/document/35792>
- [16] H. Brenzel, A. Eglmaier, A. Kubis, A. Moczall, S. Wanger und C. Woitschig, „Neueinstellungen in Teilzeit: Betriebe wie Beschäftigte können profitieren“, Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung (IAB), IAB-Kurzbericht 19/2013, 2013. (Online). Verfügbar unter: <https://www.econstor.eu/handle/10419/158413>.
- [17] B. Badura, H. Schellschmidt und C. Vetter, Hg., Fehlzeiten-Report 2003: Wettbewerbsfaktor Work-Life-Balance Zahlen, Daten, Analysen aus allen Branchen der Wirtschaft. Berlin, Heidelberg, s.l.: Springer Berlin Heidelberg, 2004.
- [18] Flexible Arbeitszeit-Vertrauensarbeitszeit, 2007. (Online). Verfügbar unter: https://www.boeckler.de/fpdf/hbs-003833/p_mbf_bvd_flex_arbeitszeit_vertrauens.pdf
- [19] Arbeitszeitgesetz: ArbZG. (Online). Verfügbar unter: <https://www.gesetze-im-internet.de/arbzg/>
- [20] H. Bonin et al., „Verbreitung und Auswirkungen von mobiler Arbeit und Homeoffice: Kurzexpertise“, DEU; Berlin; Duisburg; Mannheim; Bonn. (Online). Verfügbar unter: <https://www.ssoar.info/ssoar/handle/document/70079>.
- [21] Bernd Weller, „Die Gestaltung von Sabbatical Vereinbarungen“, Lohn+Gehalt, 2010. (Online). Verfügbar unter: https://www.heuking.de/fileadmin/DATA/Dokumente/Veroeffentlichungen/2010/108_LohnundGehalt-Juni2010-Sabbaticals.pdf
- [22] Bundesministerium für Arbeit und Soziales, „Teilzeit – Alles was Recht ist“, 2019. (Online). Verfügbar unter: https://www.bmas.de/SharedDocs/Downloads/DE/Publikationen/a263-teilzeit-alles-was-recht-ist.pdf?_blob=publicationFile&v=1
- [23] Bundesministerium für Justiz, „Richtlinien zum BEEG“, Jg. 09.2021. (Online). Verfügbar unter: <https://www.bmfsfj.de/resource/blob/156526/2f2f7a389361ce1e296febb75333a4fe/richtlinien-zum-beeg-data.pdf>
- [24] Bundesministerium für Justiz, PflegeZG - Gesetz über die Pflegezeit, 2022. (Online). Verfügbar unter: <https://www.gesetze-im-internet.de/pflegezg/BjNR089600008.html>
- [25] S. Wanger, „Arbeitszeitpolitik: Teilzeitarbeit fördert Flexibilität und Produktivität“, Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung (IAB); Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung (IAB), IAB-Kurzbericht 7/2006, 2006. (Online). Verfügbar unter: <https://www.econstor.eu/handle/10419/158214>.
- [26] Bundesministerium für Arbeit und Soziales, „Mitarbeiterkapitalbeteiligung: Modelle und Förderwege“, 2013.
- [27] Deutsche Rentenversicherung Bund, „Betriebliche Altersversorgung“, 2022.
- [28] F. Anrich und S. Kugler, Das Fairlohnung-Konzept. Wiesbaden: Springer Fachmedien Wiesbaden, 2020.
- [29] Einkommenssteuergesetz: EStG. (Online). Verfügbar unter: <https://www.gesetze-im-internet.de/estg/index.html>
- [30] P. Ellguth, H.-D. Gerner und I. Zapf, „Flexibilität für Betriebe und Beschäftigte: Vielfalt und Dynamik bei den Arbeitszeitkonten“, Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung (IAB); Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung (IAB), IAB-Kurzbericht 3/2013, 2013. (Online). Verfügbar unter: <https://www.econstor.eu/handle/10419/158397>.
- [31] R. Schmiede, R. Henn und T. Klug, „Der Mensch im Büro“ (de), 7667-1649, S. 192–199, 2005. (Online). Verfügbar unter: <https://www.ssoar.info/ssoar/handle/document/25587>
- [32] Mitarbeitermotivation, Mitarbeiterbindung. Springer Gabler, Wiesbaden, 2019.
- [33] F. Richter und C. Timmreck, Effizientes Sanierungsmanagement: Krisenunternehmen zielgerichtet und konsequent restrukturieren, 1. Aufl. Freiburg: Schäffer-Poeschel Verlag für Wirtschaft Steuern Recht GmbH, 2013.