USE Conference 2015
A Healthy Working Life in a Healthy Business

21-23 October
Hanze UAS, Groningen,
The Netherlands

DELEGATE HANDBOOK
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DELEGATE HANDBOOK

Hanze University of Applied Sciences
Groningen
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Welcome to USE2015 in the city of Groningen, The Netherlands. On behalf of the Organising Committee I hope you will find USE2015 very interesting and stimulating and that you will have a wonderful stay in Groningen and The Netherlands.

USE2015 is the third Understanding Small Enterprises conference in a series that started in Elsinore, Denmark in 2009, followed by USE2013 in Nelson, New Zealand. This conference builds on the theme set in 2013. Then, the theme was “From USE to Action: transforming our understanding of small enterprises into practise to create healthy working lives in healthy businesses”. This year’s theme consolidates the background of this conference in occupational health and safety and extends it to incorporate a wider understanding of what makes a small enterprise successful: ”A healthy working life in a healthy business”. Besides it connects with one of the main strategic themes of Hanze University of Applied Sciences; Healthy Ageing. Healthy Ageing is a lifelong process that starts even before conception, with parents who pass on their genes with risks and opportunities for a healthy life course. Lifestyle, food patterns and environment factors influence the development of health for which new knowledge is required about the influence of these factors and how they interact with one another. Research into Healthy Ageing calls for a multidisciplinary approach and in Groningen we see it as a joint research challenge for the UMCG (University Medical Hospital), RUG (University of Groningen) and Hanze University of Applied Sciences.

As a host for USE2015, the Hanze University of Applied Sciences has three main objectives for this conference, next to making it a memorable and worthwhile conference for researchers in the field of small enterprises. First, we wanted to further the international aspect of the conference. We are happy to see that over 30 countries are represented at this year’s USE conference. Second, we wanted to strengthen the applied nature of the conference. Third, we wanted to create a meeting opportunity for a broad spectrum of disciplines relevant for understanding small enterprises. Truly applied research often requires the combination of insights from different disciplines and from different perspectives. Two Centers of Applied Research and Innovation of Hanze University have joined hands in organising USE2015: Entrepreneurship and Labour Market, thus illustrating the multidisciplinary approach of Hanze University of Applied Sciences to research questions and practical challenges. Looking at the programme and all your contributions, we feel that we have been able to meet our main objectives.

Hanze University of Applied Sciences is considered to be an important contributor to the growth of the economy and employment in its region. The business ecosystem in the Groningen area consists of over 95% small and medium enterprises. Understanding small enterprises is a prerequisite for the Hanze University of Applied Sciences to play its role in the regional business ecosystem. Groningen is also rapidly becoming the “start-up capital of The Netherlands”. The Hanze University of Applied Sciences, together with the academic University of Groningen, has been at the centre of the developments leading to the creation of a stimulating environment for entrepreneurship and the creation of many new small and not so small enterprises.

We have made good use of the broad range of educations available at Hanze University of Applied Sciences, as well as its good connections with enterprises within the region, to offer you a programme that does not only offers science and applied research, but also offers more informal and otherwise entertaining and stimulating experiences. We trust that you will have a useful as well as enjoyable stay at USE2015.

Professor Hugo Velthuijsen
Professor Harm van Lieshout
CONFERENCE ORGANISING AND SCIENTIFIC COMMITTEE

USE2015 is proudly hosted by the Hanze University of Applied Sciences, located in Groningen, The Netherlands.

Professor Hugo Velthuijsen  
Chair USE2015  
Leading Lector Centre of Applied Research of Entrepreneurship and Innovation, Hanze University of Applied Sciences

Professor Harm van Lieshout  
Scientific Committee USE2015  
Leading Lector Centre of Applied Labour Market Research and Innovation, Hanze University of Applied Sciences

Nancy Huttenga  
Project manager USE2015  
Hanse University of Applied Sciences

Mariusz Soltanifar, MA  
Scientific Committee USE2015  
Hanse University of Applied Sciences

Dr. Monica Blaga, PhD  
Scientific Committee USE2015  
Hanse University of Applied Sciences

Anita Gritter  
Communication Officer USE2015  
Hanse University of Applied Sciences

Agnes Boekema  
Conference Organisation USE2015  
Hanse University of Applied Sciences
### INTERNATIONAL SCIENTIFIC BOARD

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrea Weimar</td>
<td>Berufsgenossenschaft Nahrungsmittel und Gastgewerbe, Germany</td>
</tr>
<tr>
<td>Professor Ann-Beth Antonsson</td>
<td>IVL Swedish Environmental Research Institute, Sweden</td>
</tr>
<tr>
<td>Dr Hans-Juergen Bischoff</td>
<td>International Section of the ISSA on Machine &amp; System Safety, Germany</td>
</tr>
<tr>
<td>Professor David Caple</td>
<td>Latrobe University, Australia, former President International Ergonomics Association</td>
</tr>
<tr>
<td>Dr Frank Jan de Graaf</td>
<td>Amsterdam University of Applied Sciences, Netherlands</td>
</tr>
<tr>
<td>Sylvie Gravel</td>
<td>Interdisciplinaire santé et société Faculté des sciences humaines, Canada</td>
</tr>
<tr>
<td>Alice Greife PhD</td>
<td>College of Health, Science, and Technology, University of Central Missouri, United States</td>
</tr>
<tr>
<td>Professor Peter Hasle PhD</td>
<td>National Research Centre for Working Environment, Denmark</td>
</tr>
<tr>
<td>Professor Stephen Legg</td>
<td>Massey University, New Zealand</td>
</tr>
<tr>
<td>Dr Hans Joergen Limborg</td>
<td>TeamArbejdsliv ApS, Denmark</td>
</tr>
<tr>
<td>Dr Kirsten Olsen</td>
<td>Centre for Ergonomics, Occupational Safety and Health, Massey University, New Zealand</td>
</tr>
<tr>
<td>Dr Helena Palmgren</td>
<td>Finnish Institute of Occupational Health, Finland</td>
</tr>
<tr>
<td>Dr Kogi Kazutaka</td>
<td>Institute for Science of Labour, Japan</td>
</tr>
<tr>
<td>Dr Regina Maciel</td>
<td>Universidade de Fortaleza, Brasil</td>
</tr>
<tr>
<td>Krungkraiwong Sudthida</td>
<td>Department of Labour Protection and Welfare, Thailand</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

First and foremost, we would like to thank our colleagues here in Groningen of the Hanze University of Applied Sciences that worked very hard to organise USE 2015: Nancy Huttenga, Agnes Boekema, Anita Gritter, Florian Pallas, Mariusz Soltanifar, Monica Blaga and the students of Hanze UAS who helped out during the conference days.

We thank the Groningen Congress Bureau for their professional services in conference organization.

We thank Peter Hasle and his colleagues for getting USE started in Elsinore in 2009. We thank Stephen Legg and his colleagues for continuing the series in Nelson in 2013. We thank our former colleague Frank Jan de Graaf for the idea to bring USE 2015 to Groningen. And we thank the host of USE 2017 – to be announced in the closing session of USE 2015 – for continuing what now has become a biannual tradition.

We thank the keynote speakers Professor David Marsden, Professor Gerard Zwetsloot, Professor Peter Hasle, Maureen Shaw and Ben Hume. Professor Geert Hostede, as special invited guest speaker receives a special thank you.

We would like to thank the members of our International Scientific Board for their help along the way:

- Andrea Weimar, Berufsgenossenschaft Nahrungsmittel und Gastgewerbe, Germany
- Professor Ann-Beth Antonsson, IVL Swedish Environmental Research Institute, Sweden
- Dr Hans-Juergen Bischoff, International Section of the ISSA on Machine & System Safety, Germany
- Professor David Caple, Latrobe University, Australia, former President International Ergonomics Association
- Sylvie Gravel, interdisciplinaire santé et société Faculté des sciences humaines, Canada
- Alice Greife PhD, College of Health, Science, and Technology, University of Central Missouri, United States
- Dr Hans Joergen Limborg, TeamArbejdsliv ApS, Denmark
- Dr Kirsten Olsen, Centre for Ergonomics, Occupational Safety and Health, Massey University, New Zealand
- Dr Helena Palmgren, Finnish Institute of Occupational Health, Finland
- Dr Kazutaka Kogi, Institute for Science of Labour, Japan
- Dr Regina Maciel, Universidade de Fortaleza, Brasil
- Krungkraiwong Sudthida, Department of Labour Protection and Welfare, Thailand

Last but not least, a special thanks goes to the endorsers of USE2015 for helping us spreading the message of the conference:

Hugo Velthuijsen & Harm van Lieshout
REVIEW PROCESS OF ABSTRACTS AND PAPERS FOR THE USE 2015 CONFERENCE

Abstracts for papers, special sessions and posters

An abstract for the paper/oral presentation was submitted to the USE 2015 Organising Committee. The abstracts were then reviewed by one of the scholars in the organising committee. They were either accepted (with or without comments); rejected; or rejected in this version with the possibility to resubmit an improved abstract. Some abstracts for papers were rejected and advised to consider a poster rather than a paper; vice versa, some poster proposals were accepted but the author was invited to (also) consider submitting a paper.

Papers in Proceedings

Accepted paper proposals that were submitted did not go through an additional review process, but were accepted and are included in the Proceedings. The Scientific Committee did allow authors to submit short papers for those Proceedings, if they had valid reasons to not submit a full paper.
GENERAL INFORMATION

Registration and Information Desk

The Groningen Congress Bureau (GCB) will be manning the Registration and Information Desk throughout this event. The team of the GCB, consisting of Jellemieke Ekens and Els Jans, welcome your enquiries on any conference detail you might have. The desk will be open each day from:

- **Tuesday 20th October 2015**
  - Provincial Government Building, Groningen
  - Welcoming Reception
  - 5.00 pm – 6.00 pm

- **Wednesday 21st October 2015**
  - Hanze University of Applied Sciences
  - 8.15 am – 05.30 pm

- **Thursday 22nd October 2015**
  - Hanze University of Applied Sciences
  - 8.00 am – 06.00 pm

- **Friday 23rd October 2015**
  - Hanze University of Applied Sciences
  - 8.00 am – 03.00 pm

Useful telephone numbers and addresses

- **Registration and Information Desk staff of the Groningen Congress Bureau** +31 (0)50 316 8877
- **Bud Gett Hostels** +31 (0)50 588 6558
- **Martini Hotel Groningen Centre** +31 (0)50 312 9919
- **University Hotel** +31 (0)50 311 3424
- **Hampshire City Hotel Groningen** +31 (0)50 588 6565
- **NH Hotel de Ville** +31 (0)50 318 1222
- **Taxi Noord** +31 (0)50 549 4940
- **Copy Center Groningen** +31 050 314 4371
  - Sint Jansstraat 21-23
- **Copy Right!** +31 50 571 4666
  - Kerklaan 49-51

Accommodation

Standard check out time at the hotels is 10am on the day of departure. Please do not leave your luggage in your hotel room on departure and ensure that you vacate your room by 10am. Late check-out may be subject to an additional fee. If you wish to arrange late check-out you need to request this at the hotel reception desk. Luggage storage for guests is available at the hotels.

Arrival tea and coffee

Arrival tea and coffee will be available each morning during the conference. This will be served in the Atrium of the van Olst Toren (van Olst Tower, ground floor).
Attendee List

There is an attendee list in your conference bag.

Catering

Catering during the conference will be held in the Atrium of the van Olst Toren (van Olst Tower, ground floor).

Disclaimer of liability

Whilst we have endeavored to ensure that information on the conference website and printed materials is accurate, details are subject to change without notice. Any corrections or amendments will be notified as soon as possible. In the event of industrial disruptions or service provider failures, neither the Conference Organising Committee nor the Hanze University of Applied Sciences accept any responsibility for losses incurred by delegates and their partners.

Emergency

In the unlikely event of an emergency, please leave the building by the closest marked exit and follow the instructions of the Hanze University Staff.

Internal emergency number: +31 (0)50 595 1161
National emergency number: 112

Evaluation

An online evaluation form will be emailed to attendees following the conference. We welcome your feedback and would be very grateful for a few minutes of your time to complete this.

Insurance

Registration fees do not include personal, travel or health insurance of any kind. Neither the Conference Organising Committee nor The Hanze University of Applied Sciences take any responsibility for delegates failing to take out adequate insurance cover.

Messages

Messages received during the conference for delegates will be held at the Registration and Information desk. If you are expecting a message, please check regularly.

Mobile Phones

As courtesy to our speakers and other delegates, please ensure that your mobile phone is either turned off or switched to silent mode. No mobile phones are to be used when sessions are in progress.
Name Badges

All conference attendees are required to wear their name badges throughout the conference and at all social events associated with the conference. It is your official pass to the sessions, catering and social events. The name badge also entitles you to travel by bus to and from Hanze University and your hotel free of charge.

The Conference Organising Committee of Hanze UAS (including assisting students) will wear yellow badges and the Professional Conference Organisers of the Groningen Congress Bureau can be identified by their red badges.

Should you wish to meet the International Scientific Board; they can be recognized by their blue badges.

If you would like to return your name badge at the end of the conference, please feel free to do so at the Registration and Information Desk upon your departure.

Parking

Parking is available at the parking of Hanze UAS at no additional costs. Follow the signs P3, upon arrival at the university.

Partners

If you have brought your partner to the conference, a reminder that unless your partner is registered as a delegate they are not entitled to attend the conference. However, if they wish to attend the social event of the conference and you have not yet purchased an additional ticket, please see the team at the Registration and Information Desk. Tickets are subject to availability and must be paid for in full.

Additional Social Function tickets for partners:


The Welcoming Reception at the Provincial Government Building followed by a guided walking tour on 20th October are free of charge. No registration is required.

Posters

All poster presenters are invited to put their posters on the designated poster boards, situated in the Atrium of the van Olst Toren (van Olst Tower, ground floor) on Thursday morning, October 22nd before 08.45.

For addresses of copy shops to print your poster, see Useful telephone numbers and addresses.

Presenters’ Information

In case we do have your PowerPoint presentation, which was pre-loaded as per our request, our AV-technician will load it before the workshop starts. Should you not have pre-loaded your presentation or wish to use a different one, then please provide the team at the Registration and Information Desk with your presentation on a USB drive at least 3 hours before your scheduled presentation. Our AV-technician can then get your presentation loaded on time.

Please remember: the more notice you give us, the better we will be able to assist you. If you have any questions regarding your presentation, please address these in first instance to the team at the Registration and Information desk.
**Registration Entitlements**

Full registrations includes: attendance at all conference sessions, welcoming reception including guided walking tour, as well as catering during the conference and conference delegate package.

Student registrations include: attendance at the conference sessions including catering on the day you registered and conference delegate package.

**Security**

Upon entering the university on your right hand, is a cloakroom. Hanze university is not responsible for any damage or loss of items left in the cloakroom.

Please protect your own personal belongings. Do not leave laptops, cameras, phones or any other valuable items unsecured. If you find an item of lost property please take this to the team at the Registration and Information Desk.

**Smoking**

Smoking is banned from all public buildings in the Netherlands. If you do smoke, please smoke outside in the designated areas. Please dispose of your butts thoughtfully.

**Special diets**

If you have advised us of any special dietary requirements when you registered online for the conference, these dietary requirements have been notified to the caterers.

**Transport**

During the conference your conference name badge provides you travel from and to the university and your hotel, by QBuzz, free of charge.

Busses run frequently and for an up to date time table of departure please check with the hotel staff at the hotel reception desk.

You can also plan your journey via [http://9292.nl/en#](http://9292.nl/en#) or consult the Public Transport travel advisors at telephone number 0900 9292 (€ 0,70 p/m, max. € 14).

**Venue**

The conference will be held at:

Hanze University of Applied Sciences Groningen, the Netherlands
Zernikeplein 7
Building L ‘van Olst Toren’ (van Olst Tower)

The bus stop is right in front of the university’s entrance.

All plenary conference sessions will be held at the ‘Appel’, situated at the ground floor.
The Student Lounge of the School of Facility Management will be used as breakout room during sessions, where catering is available. The student lounge is situated at the ground floor.

Alternatively you can make use of the Atrium and the Mediatheek as break out room. However, there is no standard catering available in these areas.

**Wireless Internet Access**

Wireless internet is available through hanzeguest (open internet access).

Should you work at an organization that uses Eduroam you can connect with your own account.

We provide all delegates with a guest account of Hanze UAS with free and secured internet access for which you have received an email with request to activate your account.

Should you encounter any problems, you can turn to the Registration and Information desk.
SOCIAL PROGRAMME

Welcoming Reception

All delegates are invited for the welcoming reception at the Provincial Government Building of Groningen. This historical location, in the heart of the city centre, dates from the beginning of the 20th century and has a unique atmosphere.

Join your colleagues for drinks and canapes, while mr. Patrick Brouns, Provincial Executive of the Provincial Government Groningen provides us with a welcome speech.

Date: Tuesday, October 20th 2015
Time: 17.00 – 18.00
Venue: Provincial Government Building, Groningen
Martinikerkhof 12, Groningen
Dress: Smart casual
Cost: Free of charge for all delegates
Transport: Walking distance from your hotel

Guided Walking Tour

Continuously join the guided walking tour of the beautiful city centre of Groningen. During a 45 minute walk you will see a glimpse of the rich history Groningen has to offer.

Date: Tuesday, October 20th 2015
Time: 18.00 – 18.45 pm
Starting point: Provincial Government Building Groningen
Martinikerkhof 12, Groningen
Dress: Smart casual
Cost: Free of charge for all delegates
Conference Dinner and Networking Event

A fun evening with fine food, drinks and music! An ideal moment for networking in a great, relaxing atmosphere.

Date: Wednesday, October 21st 2015
Time: 19.00 – 23.00 pm
Venue: Restaurant ’t Feithhuis Groningen
        Martinikerkhof 10, Groningen
Dress: Smart casual
Cost: The Conference Dinner can be attended after registration and payment. No reservation made yet? Please visit the Registration and Information Desk to secure your spot (costs are € 50 p.p.).
Transport: Walking distance from your hotel
**City Centre of Groningen**

**Welcoming Reception:**
Provincial Government Building, Groningen,
Martinikerkhof 10

**Conference Dinner:**
Restaurant ‘t Feithuis, Groningen,
Martinikerkhof 12

**Busstops to and from Hanze UAS:**
At the ‘Zuiderdiep’ and at the east-side of the ‘Grote Markt’
CONFERENCe VENue

Van Olst Toren, Zernikeplein 7, Groningen

- Plenary sessions
- Catering area
- Main entrance and Registration and Information Desk
- Workshop sessions
  - Rooms: F119, F120, F122, F123, F124, F213, F214, F215, F217, E144
- Breakout room: Facility Management Student Lounge (ground floor)

- P3 Parking
- Bus Stop
FACTS AND FIGURES

Facts and Figures of USE2015:

Conference Theme: A Healthy Working Life in a Healthy Business

Programme includes:
- Paper Presentation Sessions
- Poster Presentation Sessions
- Special Sessions, including Round Table Discussions
- USE 2015 provides over 30 workshops and nearly 180 contributions

Did you know:
- USE2015 gathers approx. 150-180 participants from more than 30 different countries and numerous scientific environments in Europe, Asia, Australasia, North and South America.

Keywords:
- Healthy and safe working environments at SMEs
- Health organizations and small businesses
- SMEs in a networked society

Topics include but are not limited to:
- Occupational Health & Safety
- Healthy Ageing and Work
- Workplace Innovation
- Social Innovation
- Market Oriented
- (Technology) Innovation
- Corporate and Network Governance
- Corporate Social Responsibility etc.

Endorsers:
# Conference Programme

**USE2015**  
Groningen, The Netherlands  
21-23 October 2015

### TUESDAY 20 October 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 17:00-18:00   | Welcoming Reception & Registration at the Provincial Government Building Groningen  
                - Welcome by Patrick Brouns, Provincial Executive of the Provincial Government |
| 18:00-18:45   | Guided walking tours                                                  |

### WEDNESDAY 21 October 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>08:15-09:00</td>
<td>Registration &amp; Coffee (Location: Atrium)</td>
</tr>
<tr>
<td>09:00-12:00</td>
<td>Plenary session (Location: Appel)</td>
</tr>
<tr>
<td>09:00-09:15</td>
<td>Opening address by Hanze UAS Board in the person of Rob Verhofstad</td>
</tr>
<tr>
<td>09:15-09:45</td>
<td>Opening by organizers Harm van Lieshout and Hugo Velthuijsen</td>
</tr>
<tr>
<td>09:45-10:30</td>
<td><strong>Keynote speaker:</strong> Professor Peter Hasle PhD – Occupational health and safety management in micro and small enterprises</td>
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<tr>
<td>10:30-11:00</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>11:00-11:45</td>
<td><strong>Keynote speaker:</strong> Professor Dr Gerard I.J.M. Zwetsloot – Sector Codes as a Tool for Organisational Health and Development in Craft Sectors</td>
</tr>
<tr>
<td>12:00-13:00</td>
<td>Lunch (Location: Atrium)</td>
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</table>
## Concurrent Workshop Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Workshop 1.1</th>
<th>Workshop 1.2</th>
<th>Workshop 1.3</th>
<th>Workshop 1.4</th>
<th>Workshop 1.5</th>
</tr>
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<tbody>
<tr>
<td>13:00</td>
<td>OSH: national programs and perspectives</td>
<td>SMEs, CSR and employment relations in a global economy</td>
<td>OSH: the individual worker</td>
<td>Demographic change: a challenge in SMEs in the Horeca sector</td>
<td>How can contemporary office design and new ways of working benefit employees and organizations?</td>
</tr>
<tr>
<td></td>
<td>Chair: Leni Beukema</td>
<td>Chair: Harm van Lieshout</td>
<td>Chair: Karel-Jan Alsem</td>
<td>Chair: Andrea Weimar</td>
<td>Chair: Mark Mobach</td>
</tr>
<tr>
<td>1.1 Contributions</td>
<td>Authors: Dar Ny Chuah, Pe Ter Tan and Kee Chong Tan (Karen Seah presents)</td>
<td>Title: Evaluation of a Singapore national programme on assisting SMEs in building their workplace safety and health risk management capabilities.</td>
<td>Authors: Kultida Bunjongsiri and Sunil Herat</td>
<td>Title: Barriers and challenges to apply health and safety criteria in regard to eco-industrial regulation: a case study of Saha-groups - Sriracha, Thailand.</td>
<td>Authors: Peter Lundqvist and Catharina Alwall-Svennefelt</td>
</tr>
<tr>
<td>ROOM: F1.19</td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>1.2 Contributions</td>
<td>Author: Barbara J. Durkin</td>
<td>Title: Preventing tragedies: using government procurement and the international labor standards to change the world.</td>
<td>Authors: Dirk Johan de Jong and Frank Jan de Graaf</td>
<td>Title: The transfer of employee-oriented CSR in multinational SMEs: an explorative study on the values of owner-managers within international business</td>
<td>Authors: Claire-Isabelle Roquebert</td>
</tr>
<tr>
<td>ROOM: F2.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Title: Employees and (informal corporate social responsibility (CSR) in Small and Medium sized enterprises.</td>
</tr>
<tr>
<td>1.3 Contributions</td>
<td>Authors: Myung-Sook Lee, Kee Hong Cho, Kuck-Hyun Woo and Jiae Hoon Roh</td>
<td>Title: Application of PAOT-OSH programme to SMEs in Korea.</td>
<td>Authors: Stig Vinberg and Maria Warne</td>
<td>Title: New self-regulation initiatives to discourage unfair employment practices in the Netherlands.</td>
<td>Authors: Barbara Libowitzky (Cornelia Fröschl presents)</td>
</tr>
<tr>
<td>ROOM: F2.17</td>
<td></td>
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<td>Title: Alcohol use among seasonal employees in SMEs at ski resorts.</td>
</tr>
<tr>
<td>1.4 Contributions</td>
<td>Author: Sarah Copsey (Katalin Sas presents)</td>
<td>Title: The ageing European work force - policy and practice for SMEs - the OSH response.</td>
<td>Authors: Robert Hemke and Florian Elsaesser</td>
<td>Title: Austria's solution to ensure OSH support for SMEs.</td>
<td>Authors: Robert Hemke and Florian Elsaesser</td>
</tr>
<tr>
<td>ROOM: F2.15</td>
<td></td>
<td></td>
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<td></td>
<td>Title: The importance of demographic change for the catering and hospitality industry.</td>
</tr>
<tr>
<td>1.5 Contributions</td>
<td>Authors: Niki de Jonge, Eric F. Rietzschel and Nico W. van Yperen</td>
<td>Title: The role of information novelty and individual needs.</td>
<td>Authors: Barry Haynes and Nick Nunnington</td>
<td>Title: Towards needs-based work environments.</td>
<td>Authors: Constanze Nordbrock and Barbara Schlotz-Sauter</td>
</tr>
<tr>
<td>ROOM: F2.14</td>
<td></td>
<td></td>
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<td></td>
<td>Title: The hotel, restaurant and catering trade - design of demographic change.</td>
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<tr>
<td>14:45-15:15 Afternoon refreshments</td>
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## Concurrent Workshop Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Workshop 2.1</th>
<th>Workshop 2.2</th>
<th>Workshop 2.3</th>
<th>Workshop 2.4</th>
<th>Workshop 2.5</th>
</tr>
</thead>
</table>
| 15:15-17:00  | OSH: national programs and perspectives II  
*Chair: Promila Sharma* | Workplace Innovation among SMEs  
*Chair: Jac Christis* | OSH: anchoring protection and prevention in firms  
*Chair: Franz-Josef Gellert* | Media in Prevention  
*Chair: Martina Hesse-Spötter* | The cultural dimension of theory  
*Chair: Iekje Smit* |
| 2.1 Contributions | Authors: Kavita Narwal, Neha Mehra, Preeti Singh, Tulika Khera and Promila Sharma  
Title: Challenging working conditions of Indian workers working in small scale industries and preventive measures.  
Authors: Yusuf Tahir Altunci and Mehmet Besiktaş  
Title: Occupational health and safety laws in Turkey.  
Authors: Zhang Shuting, Lv Yandan, Dong Yan and Zheng Suhui  
Title: An investigation report of potential Chinese consumers on the cognition of European brands. | | |
| 2.2 Contributions | Authors: Jac Christis and Erik Soepenberg  
Title: Lowlands sociotechnical design theory and lean production.  
Author: Geert van Hootegem | Lowlands sociotechnical design theory and lean production.  
*Author: Geert van Hootegem* | Lowlands sociotechnical design theory and lean production.  
*Author: Geert van Hootegem* | Lowlands sociotechnical design theory and lean production.  
*Author: Geert van Hootegem* |
| 2.3 Contributions | Authors: Patrick Laine and Marc Malenfer  
Title: Designing a prevention approach suitable for small enterprises.  
Authors: Karin Reinhold, Onnela Paas and P. Tint  
Title: Voluntary safety management systems in SMEs does OHSAS18001 certification help?  
Authors: Maria Chiara Leva, Nora Baffe, Tom Kontogiannis and Marko Gerbec  
Title: Total safety management for SME. | Designing a prevention approach suitable for small enterprises.  
*Authors: Patrick Laine and Marc Malenfer* | Designing a prevention approach suitable for small enterprises.  
*Authors: Patrick Laine and Marc Malenfer* | Designing a prevention approach suitable for small enterprises.  
*Authors: Patrick Laine and Marc Malenfer* |
| 2.4 Special Session | Chair/author: Martina Hesse-Spötter, with the participation of Cornelia Fröschl  
Special Session: Media in Prevention | Chair/author: Martina Hesse-Spötter, with the participation of Cornelia Fröschl  
Special Session: Media in Prevention | Chair/author: Martina Hesse-Spötter, with the participation of Cornelia Fröschl  
Special Session: Media in Prevention | Chair/author: Martina Hesse-Spötter, with the participation of Cornelia Fröschl  
Special Session: Media in Prevention |
| 2.5 Special Session | Chair/author: Iekje Smit  
Special Session: The cultural dimension of theory  
Special guest speaker: Geert Hofstede  
Speech Geert Hofstede: Cross-border communication skills for small entrepreneurs | Chair/author: Iekje Smit  
Special Session: The cultural dimension of theory  
Special guest speaker: Geert Hofstede  
Speech Geert Hofstede: Cross-border communication skills for small entrepreneurs | Chair/author: Iekje Smit  
Special Session: The cultural dimension of theory  
Special guest speaker: Geert Hofstede  
Speech Geert Hofstede: Cross-border communication skills for small entrepreneurs | Chair/author: Iekje Smit  
Special Session: The cultural dimension of theory  
Special guest speaker: Geert Hofstede  
Speech Geert Hofstede: Cross-border communication skills for small entrepreneurs |

### 19:00-23:00

Conference Dinner & Networking Event (Location: Restaurant ’t Feithhuis)

**19:00-19:30**  
Reception

**19:30-19:40**  
Welcome by Paul Ganzeboom, Leading Dean Centre of Applied Research of Entrepreneurship and Innovation

**19:40-23:00**  
Dinner & Drinks
**THURSDAY 22 October 2015**

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<thead>
<tr>
<th>Time</th>
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<tr>
<td>08:00-08:45</td>
<td>Registration &amp; Coffee (Location: Atrium)</td>
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<tr>
<td>08:45-09:45</td>
<td>Plenary Session (Location: Appel)</td>
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<tr>
<td>08:45-09:45</td>
<td><strong>Keynote speakers:</strong> Maureen Shaw and Ben Hume - BC CEO Safety Charter Model and Results</td>
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<tr>
<td>09:45-10:15</td>
<td>Coffee Break</td>
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<tr>
<td>10:15-12:00</td>
<td>Concurrent Workshop Sessions</td>
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</table>

| Workshop 3.1  | OSH: sector level studies 1  
Chair: Sisse Grøn |
| Workshop 3.2  | How SMEs organise competitive advantage  
Chair: Gert Walhof |
| Workshop 3.3  | Healthy Ageing & Work  
Chair: Leni Beukema |
| Workshop 3.4  | Research Methods for investigating health and safety practice in micro and small enterprises  
Chair: Monique Ramioul |
| Workshop 3.5  | Online tools: a good practice to support implementation of IOSH measures in SMEs  
Chair: Marc Malenfer |

3.1 Contributions
ROOM: F1.19
Authors: Danièle Champoux, Caroline Jolly and Ludovic Tuduri
Title: Pesticides use in apple production in Québec: Addressing OHS issues from the perspective of SBs research.
Authors: Kari Kjøstveit and Kari Anne Holte
Title: Farming in transition: how do Norwegian farmers interpret and approach new workplace risks?
Authors: Ann Hedlund and Ing-Marie Andersson
Title: Drivers' opinions concerning working conditions in forest fuel production.

3.2 Contributions
ROOM: F2.13
Authors: Geoffrey Hagelaar, Anne Staal, Richard Holman and Gert Walhof
Title: Tool for identifying critical control points in embedded purchasing activities in SMEs.
Authors: Anne Staal, John Tookey, Jeff Seadow, Mark Mobach and Gert Walhof
Title: How innovative New Zealand firms procure environmental technical innovations for the construction industry: a literature review.
Authors: Geoffrey Hagelaar, Anne Staal, Richard Holman and Gert Walhof
Title: The nature of embedded purchasing activities in SMEs: results from a Dutch multiple case study.
Author: Petra Oden
Title: SMEs cooperate to meet social procurement conditions.

3.3 Contributions
ROOM: F2.17
Authors: Klaske Veth, Hubert Kozlinski and Beatrice van der Heijden
Title: HRM bundles and employee outcomes: Opening the black box. The roles of job demands and job resources.
Authors: Cécile Oosting, Leni Beukema, Arie de Ruijter and Leo Witvliet
Title: To live or to survive in organizations.
Author: Leni Beukema
Title: Strengthening professional resilience in long-term sick leave.
Authors: Anne Jortikka and Helena Palmgren
Title: Work well-being of self-employed.
### 3.4 Contributions
**ROOM: F1.20**

- **Author:** William Cockburn  
  **Title:** Introduction to ESENER
- **Author:** Arnold Riedmann  
  **Title:** Methodological challenges of interviewing micro and small firms on the topic of health and safety – experiences from ESENER-2.  
  **Authors:** Lothar Lissner and Réka Zayzon  
  **Title:** The OSH-situation in micro and small firms – methodological challenges in European and German surveys and research projects.

### 3.5 Contributions
**ROOM: F2.14**

- **Authors:** Marc Malenfer and Patrick Laine  
  **Title:** Online tools: a good practise to support implementation of OSH measures in SME.
- **Authors:** Pierre Canetto and Jacques Marsot  
  **Title:** MAVimplant, an online tool for building a 3D mockup workplace for small enterprises.
- **Authors:** Albert Hollander and Henri Heussen  
  **Title:** Stoffenmanager: one decade of development and implementation.
- **Authors:** Garrett Burnett and Thomas Cunningham  
  **Title:** Digital delivery of occupational safety and health content: making research easy to use and easy to steal.

### 12:00-13:00

<table>
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<th>Time</th>
<th>Event</th>
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<tr>
<td>12:00-13:00</td>
<td>Lunch (Location: Atrium)</td>
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</table>
| 12:00-13:00| Poster session (Location: Atrium)  
  **Chair:** Hans Juergen Bischoff  
  Poster contributions are presented in the Atrium. |
| 13:00-13:45| Plenary Session (Location: Appel)  
  **Keynote speaker:** Professor David Marsden - Well-being policies, sickness absence and workplace performance |
| 13:45-14:15| Coffee Break                  |
| 14:15-15:45| Concurrent Workshop Sessions  |

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<thead>
<tr>
<th>Workshop 4.1</th>
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<th>Workshop 4.4</th>
<th>Workshop 4.5</th>
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</table>
| OSH: sector level studies 2  
  **Chair:** Ghita Bracalletti | Special Session  
  Roundtable Sustainability & Finance I  
  **Chairs:** Margreet Boersma and Frank Jan de Graaf | OSH: firm’s culture and employment relations  
  **Chair:** Barry Foster | Results from the Second European Survey of Enterprises on New and Emerging Risks (ESENER-2)  
  **Chair:** Peter Hasle | Quantified self tools in the workplace  
  **Chair:** Hilbrand Oldenhuis |

### 4.1 Contributions
**ROOM: F1.19**

- **Authors:** Sadao Horino, Yutaka Kobayashi, Tomonobu Sugisaki and Yoshiaki Kono  
  **Title:** Contributing factors for overwork accidents prevention in small enterprises of truck, bus and taxi businesses.  
  **Author:** E. Rotoli, Ghita Bracalleti and F. Grosso  
  **Title:** The “Italian" OIRA project: the development of the tool according to the Occupational Health and Safety Italian Legislation.  
  **Authors:** Tae-Won Jang, Hyoung-Ryoul Kim, Junsu Byun and Park Sung-Hye  
  **Title:** Evaluation for adequate driving and resting time of the commercial bus drivers.

### 4.2 Special Session
**ROOM: E1.44**

- **Chair Roundtable discussion:** Margreet Boersma and Frank Jan de Graaf  
  **Special Session:** Roundtable The role of finance & accounting in healthy businesses and a sustainable society - Sustainability & Finance I
| 4.3 Contributions | ROOM: F2.17 | Authors: Barry Foster, Deirdre Farr and Ian Laird  
Title: The inter-relationship between employment relations practices and occupational health and safety practices in SMEs: testing a theoretical perspective.  
Authors: Deirdre Farr and Barry Foster  
Title: Defining a healthy and safe work environment in SEs in New Zealand: a study of the 'good employer'.  
Authors: Karin Reinhold, Marina Jarvis and Anu Viorevere  
Title: Healthy and safe working environment, organisational learning at SMEs as a part of company safety culture. |
| 4.4 Contributions | ROOM: F1.20 | Authors: Xabier Irastorza, Malgorzata Milczarek and William Cockburn  
Title: Occupational Safety and Health Management – evidence from ESENER-2.  
Authors: Malgorzata Milczarek, Xabier Irastorza and William Cockburn  
Title: Managing psychosocial risks in small enterprises – ESENER-2 findings.  
Author: David Walters  
Title: Studying worker representation and involvement in health and safety in micro and small firms — what we know and some methodological challenges for finding out more. |
| 4.5 Contributions | ROOM: F2.17 | Authors: Hans Wortmann, Bart Verkerke, Sandra Brouwer and Monique Lorist (Maarten Lahr presents)  
Title: SPRINT@Work: how do we keep employees fit and healthy?  
Authors: Hilbrand Oldenhuis, Louis Polstra, Hugo Velthuijsen and Martijn de Groot  
Title: Increasing employees level of sustainable employability via self-tracking devices.  
Authors: Marjolein Douwes and Heleen de Kraker  
Title: Three Dutch tools for online risk assessment of physical workload. |

| 15:45-16:15 | Afternoon refreshments |
| 16:15-17:45 | Concurrent Workshop Sessions |

| Workshop 5.1 | Workshop 5.2 Special Session | Workshop 5.3 | Workshop 5.4 Special Session | Workshop 5.5 Special Session |
| OSH: sector level studies 3 | Roundtable Sustainability & Finance II | Roundtable discussion on proposals for research based on the ESENER-2 dataset | Partnering with Small Business Enterprises to Conduct Health Promotion Research |
| Chair: Supriya Lahiri | Chairs: Margreet Boersma and Frank Jan de Graaf | Chair: Garrett Burnett | Chair: William Cockburn |

5.1 Contributions | ROOM: F1.19 | Authors: Supriya Lahiri, Tommaso Tempesi and Somnath Gangopadhyay  
Title: Is there an economic case for training intervention in the manual material handling sector of developing countries?  
Authors: Astrid Antes and Roswitha Hosemann  
Title: Start clear! Healthy hands and beauty.  
Authors: Sisse Grøn, Jeremy Hayman and Juan Rocha  
Title: The fishing industry in transformation – what are the implications for health and safety? |

5.2 Special Session | ROOM: E1.44 | Chair: Roundtable discussion: Margreet Boersma and Frank Jan de Graaf  
Special Session: Roundtable The role of finance & accounting in healthy businesses and a sustainable society - Sustainability & Finance II |

5.3 Contributions | ROOM: F2.17 | Authors: Karl Gummesson and Alexis Rydell  
Title: Safety training to reduce wood dust: a work method.  
Author: Jaana Lerssi-Uskelin  
Title: An empowering network for micro- and small enterprises.  
Author: Gérard Ropert  
Title: Partnerships related to occupational risk prevention in SMEs. |
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<tr>
<th>Session</th>
<th>ROOM</th>
<th>Chair/Authors</th>
<th>Topic</th>
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<tr>
<td>5.4</td>
<td>F1.22</td>
<td>William Cockburn</td>
<td>Roundtable discussion on proposals for research based on the ESENER-2 dataset</td>
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<tr>
<td>5.5</td>
<td>F1.23</td>
<td>Laura A. Linnan and Guadalupe X. Ayala</td>
<td>Partnering with Small Business Enterprises to Conduct Health Promotion Research</td>
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</table>
### Concurrent Workshop Sessions

**Workshop 6.1**
OSH: occupational health services and SMEs  
**Chair:** Helena Palmgren
- **Contributions**
  - Authors: Kristina Rajala, Simo Kaleva and Helena Palmgren
  - Title: Small enterprises' and entrepreneurs' experiences of occupational health services in North Karelia.
  - Authors: Helena Palmgren, Simo Kaleva, Kristina Rajala and Minna Savinainen
  - Title: How to enable SME arrange occupational health services?
  - Authors: Harm van Lieshout, Anneloes Scholing and Kathinka Geling
  - Title: Preventing mismatch? A regional labour market pilot.

**Workshop 6.2**
Governance in SMEs  
**Chairs:** Frank Jan de Graaf and Hugo Velthuijsen
- **Contributions**
  - Authors: Sisse Grøn and Hans Joergen Limborg
  - Title: Networks of SMEs - a potential policy instrument to promote health and safety?
  - Author: Marcel van der Poel
  - Title: Intercultural competence @ SMEs.
  - Author: Jaan Kets
  - Title: Reviewing the relationship between technological innovation and internationalization from a dynamic capabilities' perspective.
  - Authors: Austin D’Souza, Hugo Velthuijsen, Hans Wortmann and George Huitema
  - Title: Developing a viable business model for community owned solar farms in the Netherlands.

**Workshop 6.3**
OSH: the firm  
**Chair:** Ivan Silva
- **Contributions**
  - Authors: Ivan Silva and Carolina Cuadra
  - Title: Multidimensional diagnosis of the work environment in SMEs.
  - Author: Jean-Claude Poirier
  - Title: The financial incentives for SMEs OSH activities in France.
  - Authors: Jo-Ann Chen-Yu’En and Kee Chong Tan
  - Title: SME business leaders' motivations and barriers in workplace safety and health leadership.
  - Authors: Thomas Cunningham, Garrett Burnett and Brenda Jacklitsch
  - Title: Diffusion of an integrated approach to health, safety and wellness for smaller businesses: perspectives from intermediary organizations.

**Workshop 6.4**
SESAME  
**Chair:** Monique Ramioul
- **Contributions**
  - Author: Monique Ramioul
  - Title: Safe Small and Micro Enterprises – What works and why it works... Outcome from the State-of-Play research of the SESAME project.
  - Authors: Ann-Beth Antonsson and Peter Hasle
  - Title: How can context affect what strategies are effective in improving the working environment in small companies?
  - Authors: Ann-Beth Antonsson and Peter Hasle
  - Title: What kind of knowledge do small companies need to improve their working environment?
  - Author: David Walters
  - Title: Addressing the 'workers standpoint' on health and safety in small and micro firms.
## 6.5 Contributions

**ROOM:** F2.15  
**Authors:** Karel-Jan Alsem and Eric Kostelijk  
**Title:** How good are health care companies at branding?  
**Authors:** Leenke Visser and Dirk Johan de Jong  
**Title:** Decision-making process in elderly care: an explorative study.  
**Author:** Jochem Hoekstra  
**Title:** The CQI as a predictor of resident satisfaction in nursing homes.

### 10:30-11:00

| 10:30-11:00 | Coffee Break |

### 11:00-12:45

#### Concurrent Workshop Sessions

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<th>Workshop 7.4 Special Session</th>
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<td>Sustainability in SMEs</td>
<td>The business side of health care organisations: realising change</td>
<td>Roundtable Entrepreneurial networking: How can your network contribute?</td>
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<tr>
<td><em>Chair:</em> Stig Vinberg</td>
<td><em>Chair:</em> Egbert Dommerholt</td>
<td><em>Chair:</em> Hugo Velthuijsen</td>
<td><em>Chairs:</em> Frans Donders and Martin Haring</td>
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</tbody>
</table>

### 7.1 Contributions

**ROOM:** F1.19  
**Authors:** Etsuko Yoshikawa, Toru Yoshikawa and Kazutaka Kogi  
**Title:** Development of a participatory workplace environment improvement program to promote primary prevention for work-related stress in Japan.  
**Authors:** Just Mields and Christian Gericke  
**Title:** Mental stress in SMEs.  
**Authors:** Stig Vinberg, Elisabeth Hansen, Lisa Markussen and Bodil Landstad  
**Title:** Psychosocial working conditions, health and life-style among leaders and co-workers in small-scale enterprises.  
**Authors:** Kazutaka Kogi, Toru Yoshikawa and Etsuko Yoshikawa  
**Title:** The roles of voluntary facilitators in participatory work improvement and stress prevention programmes based on group work of their co-workers.

### 7.2 Contributions

**ROOM:** F2.13  
**Authors:** Parisa Salimzadeh, Jerry Courvisanos and Raveendranath Ravi Nayak  
**Title:** An exploratory study of factors affecting sustainability adoption in small and medium-sized enterprises.  
**Authors:** Maartje Harmelink and Annette Klarenbeek  
**Title:** Social acceptance of sustainable issues. A discourse analysis of how people speak about bio-digestion.  
**Author:** Egbert Dommerholt  
**Title:** The corporate sustainability performance-financial performance link revisited.

### 7.3 Contributions

**ROOM:** F2.15  
**Author:** Gunther Heiss  
**Title:** SME’s internationalization: the role of organizational capabilities on strategy in the German MedTech industry.  
**Authors:** Marike Peterzon and Hugo Velthuijsen  
**Title:** Using governance to understand how to improve an SME’s success with introducing ehealth applications in Dutch healthcare organisations.  
**Authors:** Jan Balje, Anke Carter and Hugo Velthuijsen  
**Title:** Agile as change approach in ehealth innovation projects.

### 7.4 Special Session

**ROOM:** F1.23  
**Chair Roundtable discussion:** Frans Donders and Martin Haring  
**Special Session:** Entrepreneurial networking: How can your network contribute?

### 12:45-13:30

| 12:45-13:30 | Lunch (Location: Atrium) |

### 13:30-14:30

**Closing Session (Location: Appel)**  
*Chair:* Harm van Lieshout  
**Closing Session, including:** Best paper award, highlights from the sessions, different perspectives: an interview session and ‘until we meet again’. 

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SPECIAL INVITED GUEST SPEAKER OF USE 2015

Professor Geert Hofstede

The USE2015 organising committee is proud to announce that Professor Geert Hofstede, a pioneer and international leading scientist in the field of International Communication, has accepted the invitation to give a speech during the conference. The speech will take place in a special session titled: Cross-border communication skills for small entrepreneurs.

Cross-border communication skills for small entrepreneurs

Small entrepreneurs without international experience who wish to reach out across national borders – for example through digital products – may run into cultural problems, and benefit from training in cross-cultural communication skills. The workshop deals with basic concepts for this kind of training.

Biography

Geert Hofstede (1928) holds a Master's level degree in Mechanical Engineering from Delft Technical University and a Doctorate in Social Psychology from the University of Groningen. He had a varied career in both industry and academia, involving extensive international activities. Since the publication of his book “Culture's Consequences” (1980, new edition 2001), he has been considered a founder of comparative intercultural research; his ideas are used worldwide. His student textbook “Cultures and Organizations: Software of the Mind” (3rd edition 2010 co-authored by Gert Jan Hofstede and Michael Minkov) has so far appeared in 21 languages.
USE2015 KEYNOTE SPEAKER PROFESSOR DAVID MARSDEN

Professor David Marsden

David Marsden is Professor of Industrial Relations and an Associate in the Labour Markets Research Programme within the Centre for Economic Performance (CEP).

Short bio Professor David Marsden

David Marsden, Professor of Industrial Relations and an Associate in the Labour Markets Research Programme within the Centre for Economic Performance (CEP).

Professor David Marsden is interconnected with the London School of Economics and Political Science (LSE) in England and joined LSE as a lecturer in 1980. He is Professor of Industrial Relations and an Associate in the Labour Markets Research Programme.

Professor Marsden is a member of the Governing Council of the Institut für Arbeitsrecht und Arbeitsbeziehungen in der Europäischen Gemeinschaft (IAAEG) and has previously been President of the Society for the Advancement of Socio-Economics (SASE) and a member of the Le Conseil scientifique research initiative on 'Travail', set up by the then Minister of Labour, Martine Aubry, and the Minister of Education and Research, Claude Allègre. He is a founding editor of Industrielle Beziehungen (the German Journal of Industrial Relations) and an editor of Travail et Emploi (a research journal published by the French ministry of labour). He was also editor of the Socio-Economic Review and is on the Editorial Board of the International Journal of Public Management.

Professor Marsden has worked as an adviser to the European Commission, the International Labour Organisation, the OECD, the World Bank, and to various UK trade unions, and has been visiting professor at the universities of Aix-en-Provence, Rome and Trier.

Abstract: Well-being policies, sickness absence and workplace performance

Occupational health and safety management (OHSM) in micro and small enterprises may look like an odd ex-pression. Most owner-managers do not think of OHSM as something to give priority. They are occupied with management of the core business which in many cases constitute a simple fight for survival. However, OHS is always managed in one way or the other, and the important point is to learn how the owner-manager focus on the core business can be integrated with improvement of the work environment. It is therefore crucial to understand the thinking of owner-managers and their social relations with the employees in order to develop support programmes for micro and small enterprises which successfully improves conditions for owner-managers as well as their employees.
USE2015 KEYNOTE SPEAKER PROFESSOR DR GERARD ZWETSLOOT

Professor Dr Gerard I.J.M. Zwetsloot

Gerard Zwetsloot is senior researcher and consultant at TNO Quality of Life – Work & Employment.

Short bio Professor Dr Gerard I.J.M. Zwetsloot

Gerard I.J.M. Zwetsloot started his own business, Gerard Zwetsloot Research & Consultancy, spring 2015. He is honorary professor in Occupational Health and Safety Management at the University of Nottingham (UK, China, Malaysia). Moreover he is a senior guest research scientist at the Netherlands Organisation for Applied Scientific Research TNO (Netherlands, his former employer).

Gerard holds an MSc in chemistry (University of Utrecht) and a PhD in Social Sciences (University of Leiden). His work focuses on innovative management approaches relevant for health and safety at work as well as business excellence, and/or corporate social responsibility.

Gerard is involved in several (international) research and strategic consultancy projects. He has generated a wide range of national and international publications and is frequently invited as (keynote) speaker. For EU-OSHA he was the author (among others) of the OSH-WIKI paper on ‘OSH management in small and micro enterprises’.
Abstract: Sector Codes as a Tool for Organisational Health and Development in Craft Sectors

Micro enterprises are dominantly practical and action oriented. They are usually less reflective in their operations, while their capabilities to innovate independently are limited. Without external support, innovation in the craft sector tends to go by generation. This is neither sufficient in periods of rapid innovation and change, nor to respond to new challenges in OSH, sustainability, quality and customer expectations.

Yet, micro enterprises jointly form an important backbone of our economy. The Dutch Centre for Craft Economy (CvAE) estimates the craft sector in the Netherlands at around 290,000 enterprises where about 865,000 people are working. It is therefore very important to develop successful ‘supportive structures for these micro enterprises.

I will focus on one such supportive structure in particular, the sector code, which was developed over a period of around twenty years by the former Dutch Crafts Trade Association (HBA) and is now promoted by the Dutch Centre for Crafts Economy (CvAE) and their associated sectors.

While large enterprises make use of management systems for Quality, Environment and Safety & Health (QESH) to improve their performances, these are not practical and feasible for micro enterprises. The sector code, however, is meant to have a similar meaning for sectors of micro enterprises, and is successfully used in around 25 craft sectors in the Netherlands, varying from road pavers to podiatrists and silver- and gold smiths. It is a standard for the sector, but primarily a practical guideline (now on-line) for the entrepreneur to improve his business as well as his QESH performance. To some extend comparable to the procedures and tools that larger companies share with their local departments and teams. Attention is paid to business development, sustainability and environmental impact, safety and health at work, corporate social responsibility, and maintenance.

The development of a code is now a standardised process, which requires the participation of entrepreneurs and employees from the sector, OSH experts, governmental inspectors, vocational education, and other relevant stakeholders.

After its development the sector can support it implementation by dedicated communication, sector meetings, benchmarking, and integration into vocational training. Two sectors have recently used the code as the basis for a joint recognition as ‘recognised craft entrepreneurs in their respective sectors’. Contrasting to the code it-self, it is still unclear whether the certification generates sufficient added-value for the sector as a whole.
USE2015 KEYNOTE SPEAKER PROFESSOR PETER HASLE

Short bio Professor Peter Hasle PhD

Peter Hasle is professor at the Center for Industrial Production, Department of Business and Management, Aalborg University. Former positions include a professorship at the National Research Centre for the Working Environment and positions at the Technical University of Denmark, at an independent research institute, the International Labour Organization and the occupational health service. Extensive publications in international journals, books and book chapters. Keynote speaker at several international conference. Research interest in integration of the working environment in management and operation, organisational social capital, organization of working environment programmes, and small enterprises. He is presently involved in an European research project on occupational safety and health management in micro and small enterprises. The project is executed in collaboration with research partners from nine European countries and funded by the European Agency for Occupational Safety and Health in Bilbao.

Abstract: Occupational health and safety management in micro and small enterprises

Occupational health and safety management (OHSM) in micro and small enterprises may look like an odd expression. Most owner-managers do not think of OHSM as something to give priority. They are occupied with management of the core business which in many cases constitute a simple fight for survival. However, OH is always managed in one way or the other, and the important point is to learn how the owner-manager focus on the core business can be integrated with improvement of the work environment. It is therefore crucial to understand the thinking of owner-managers and their social relations with the employees in order to develop support programmes for micro and small enterprises which successfully improves conditions for owner-managers as well as their employees.
Shared keynote by: Maureen Shaw & Ben Hume

Maureen Shaw is Former president and CEO Industrial Accident Prevention Association (IAPA).

Ben Hume is President of Sheppards Building Materials Inc.

Short bio Maureen Shaw

Expertise
Extensive experience and knowledge in Occupational Health and Safety systems, risk management, human resources, workplace mental health, wellness and creating psychologically healthy workplaces. Seasoned senior executive, leading 250 professionals has supported putting theory into practice. Multi-Stakeholder and bipartite policy development and governance experience. She is currently a member of the Victoria and Esquimalt Police Board.

Profile
Maureen has spent over 30 years as a leader in Occupational Health and Safety, provincially, nationally and internationally. Former President and CEO of IAPA (Industrial Accident Prevention Association) headquartered in Toronto. Maureen led IAPA in the development of its Healthy Workplace Model, which integrates leadership, physical health and safety, wellness and psychological health into organizational strategy and culture. The Healthy Workplace framework and model has been adapted and adopted by the World Health Organization as their global strategy. She is a thought leader, lecturer and presenter in, boardrooms, conferences and in the education community provincially, nationally and internationally. Maureen is a regular writer and contributor on organizational wellness and mental health for Canadian Occupational Safety Magazine. Maureen is a passionate lifelong learner and teacher of organizational leadership, governance and people. She has been recognized nationally and internationally for her leadership, including a recipient of the Inaugural Queen’s Diamond Jubilee Medal; recognized by the International Labour Organization (ILO) for her “Contribution and commitment to the worldwide advancement of occupational safety and health”; the Commemorative Medal for the 125th Anniversary of Confederation, also referred to as the Canada 125 Medal; CalgaryYWCA Woman of Distinction in Business, Labour, and the Professions Award.

Short bio Ben Hume

Mr. Ben Hume is the President of Sheppards Building Materials Inc located in Surrey BC. Sheppards is a manufacturer of Aluminum Sunrooms, Conservatory’s and Patio covers. Ben is also CEO of Mirage Screen Systems a manufacturer of Retractable Screen Systems which are marketed throughout North America, Mexico and the UK. He is also a Director and partner in Humble Manufacturing Ltd a precision sheet metal shop located in Burnaby BC.

Mr. Hume is a past Chair of the Canadian Manufacturers and Exporters Canada national board. After 20 years Ben retired from the CME board in October of 2014. He also Chairs the Steering Committee of the BC Safety Charter, a member of the “Industry Training Authority of BC” Manufacturing Sector Committee, is a member of the Programs committee for the BC Division of CME and is a Director of the Immigrant Employers Council of BC.

Mr. Hume was born in Vancouver (1948), a resident of Vancouver BC and is a graduate from the Administrative Management program at BCIT. Grand Children, Boating and public policy are his main outside interests.
Abstract: BC CEO Safety Charter Model and Results

Chief Executive Officer Leadership in Health and Safety Prevention- A Healthy Working Life in a Healthy Business:
BC CEO Safety Charter Model and Results.

Without the most senior executives in an organization engaged & providing leadership to create the culture and direction; improvements and sustainability will be difficult to achieve. In 2011, building on lessons learned from a model in the province of Ontario in Canada, the Food and Manufacturing Alliance (FIOSA-MIOSA) of the Province of British Columbia brought together 23 Senior Executives in a dialogue on how they could work together to make the culture of health and safety a core value in their businesses and how they could influence others, leader to leader. The BC CEO Safety Charter was born as a networking and learning community for leaders.

Nearly five years of work culminated in May 2015 which saw 150 Senior Executive signatories coming together to share experiences to learn and renew their commitment to each other and the Charter. Early measures are showing improvements in both the health and safety of workers and the overall performance of their operations. The shift in organizational health and safety culture amongst signatories is evidenced by the voice of the Chair of the Steering Committee, Mr. Ben Hume. He says his epiphany moment occurred when an employee asked him: “When are you going to stop hurting people around here”. Maureen Shaw, Advisor to the CEO Charter and Ben Hume Chair of the Steering Committee will share the vision and experience with the view to the future.
Evaluation of a Singapore national programme on assisting Small and Medium Enterprises (SME) in building their workplace safety and health risk management capabilities

*paper included in Conference Proceedings*

Authors: D. N. Chuah(1), P. T. Tan(1) and S. L. Gan(1)

1 Workplace Safety and Health Institute, Singapore

Email: chuah_dar_ny@wshi.gov.sg | tan_pe_ter@wshi.gov.sg

Abstract. Reducing risk at source is one of the three key principles of Singapore’s Workplace Safety and Health (WSH) framework. To help small and medium enterprises build their capability in managing safety and health risks, a national bizSAFE programme was launched in 2007. The objective of this study was to evaluate the impact of bizSAFE programme towards building SME’s WSH risk management capability as well as the level of leadership commitment towards a safe and healthy workplace. The study also investigated the business value of companies having bizSAFE certification. Perception survey was conducted to 1390 company representatives (bizSAFE = 868; non-bizSAFE = 522), 273 workers, and 335 potential clients of SMEs. Overall, the results showed that bizSAFE companies scored higher than its non-bizSAFE cohort and the differences were significant. The findings suggested that bizSAFE programme had a positive influence on smaller companies (up to 50 employees) towards building WSH capability through raising risk awareness and management. There was also evidence that bizSAFE certification created business value for bizSAFE companies as clients would prefer to engage them because of their better management of WSH hazards.

Keywords. Risk management, capability building, evaluation, programme
Barriers and Challenges to Apply Health and Safety criteria in Regard to Eco-Industrial Regulation: A Case Study of Saha Group, Sriracha, Thailand

*paper included in Conference Proceedings*

Authors:
Kultida Bunjongsiri(1), Dr. Sunil Herat(1), Dr. Tri Dung Phung(2), Assoc. Prof. Dr. Jakkris Sivadechathep(3) and Prof. Cordia Chu(2)

1 Griffith School of Engineering, Griffith University, Australia
2 Centre for Environment and Population Health, Griffith University, Australia
3 School of Health Science, Sukhothai Thammathirat Open University, Thailand

Email: kultida.bunjongsiri@griffithuni.edu.au | s.herat@griffith.edu.au

Abstract. In the movement to industrialise Thailand, sustainable development and sustainability have been promoted in many different ways. The concept of an Eco-Industrial Park (EIP) is one of the strategies to implement the concept of industrial ecology by inter-company collaboration. The application of EIP aims simultaneously to reduce a range of environmental impacts, including impacts on human health and ecosystems. In Thailand, planning for EIP still is in its infancy. However, political influences have determined decisions, rather than a clearly defined economic strategy. Thus, not all projects have been successful. Of the 22 criteria adopted by the Thai government for assessing EIP performance, most pilot projects have only focused on ‘wastes’ and ‘by-products’ management, none address Health and Safety (H&S). In this paper we look at barriers and challenges to effective implementation of EIP in a selected industrial park (Saha Group Industrial Park, Sriracha) by using the H&S aspect to assess the effective implementation of the concept of EIP. Data was collected by survey questionnaire in the H&S sections of the businesses in 2014. Five main barriers were found in the application of Health and Safety criteria to Eco-Industrial regulation. First, the definitional requirements for H&S criteria were not clearly understood by the industrial park. Second, there are lacks of specific tools from related government agencies to support the individual needs of each industry. Third, the government’s policies are not understood by the entire workforce. It’s only done by senior management, so the implementation is inconsistent. Fourth, the funding supported for running the projects from the government is lack of continuity both in the pilot projects and the new projects in each fiscal year. Lastly, the extra "encouragement" of tax reduction for participating firms, as well as potential regulatory action or litigation are clearly needed. Finally, the success of Eco-Industrial project in Thailand depends on cooperation from all parties in the park.

Keywords. Industrial ecology; Eco-Industrial Development (EID); Eco-Industrial Park (EIP); Health and Safety (H&S); Barriers and Challenges; Eco-Industrial city
Further steps in a Swedish occupational health and safety strategy for agriculture

– The Swedish Centre for Agricultural Business Management & New Standards for Working Conditions in Agriculture

Authors: Peter Lundqvist & Catharina Alwall Svennefelt
Swedish University of Agricultural Sciences, Department of Work Science, Business Economics and Environmental Psychology, Alnarp, Sweden.

E-mail: Peter.Lundqvist@slu.se | Catharina.Alwall@slu.se

Conclusions
After a five year national project “Safe Farmers Common Sense” are we now taking further steps towards our goal – Zero fatalities in agriculture – by new initiatives:

• The Swedish Centre for Agricultural Business Management – in order to integrate health & safety in professional management

• Developing and implementing Swedish standards for working conditions in agriculture – in order to improve the working conditions for farm workers

• Both initiatives will be evaluated

Introduction
In Sweden there has been a number of initiatives in order to improve the working conditions and reach the goal - Zero fatalities in agriculture. The main initiative was the five year national project “Safe Farmers Common Sense” (Säkert Bondförnuft), funded the European Commission (EU) during 2009-2013. Evaluations of the results are on it’s way, but the year 2013 was historic with zero (0) work-related fatalities in Swedish agriculture. Since then there has been fatalities again and the project was not given further funding The project is now being evaluated in a number of studies including followup interviews and enquiries among farmers and extension personnel, injury statistics and interviews with injured farmers, farm workers and family members. The results will be presented in both scientific papers as well as a PhD dissertation 2016/17.

In order to break new grounds are we now initiating two new initiatives in order to integrate health and safety into the modern professional farming:

• Integrating health & safety into business management in agriculture

• Establishing national standards for working conditions in agriculture

Standards for Working Conditions
Developing Swedish certification standards for work in agriculture. An interesting process will lead to a standard and possibilities to be certified as a work place with healthy and safe working conditions. The work is coordinated by Sigill Kvalitetssystem and involves a working group with representatives from the whole food-chain as well as health & safety experts. The first goal is to include companies with field grown crops and employs seasonal farm workers, mainly migrant workers.

Health & Safety into Business Management

The Swedish Centre for Agricultural Business Management at the Swedish University of Agricultural Sciences in Alnarp. The interesting approach is that the Centre will have a large integrated proportion of work science and work environment management in research, education as well as in extension. The goal is that health & safety should be a natural and obvious part of modern farm management.

For further information: http://kcf.slu.se/ & www.slu.se/aem
WORKSHOP 1.2  SMEs, CSR and employment relations in a global economy
Chair: Harm van Lieshout
ROOM: F2.13

The transfer of employee-oriented CSR in multinational SMEs: An explorative study on the values of owner-managers within international business

*paper included in Conference Proceedings*

Author: Dr. Dirk Johan de Jong
Lecturer/ senior researcher
Hanze University of Applied Sciences
Zernikeplein 7, 9447 AS Groningen,
d.j.de.jong@pl.hanze.nl

Author: Dr. Frank Jan de Graaf
Professor Corporate Governance & Leadership
Hogeschool van Amsterdam
Centre for Applied Research on Economics & Management- CAREM
Postbus 1025 / 1000 BA Amsterdam
H.J.E. Wenckebachweg 144-148 / 1096 AR Amsterdam

Abstract. By assessing four cases, the paper develops propositions about the transfer of employee oriented corporate social responsibility (CSR) practices within multinational SMEs. Specifically we explore whether an individual owner-manager can add value within a foreign subsidiary by means of normatively-based, employee-oriented CSR. Based on four case-studies we suggest that not only motives but also the skills of the owner/manager as an institutional entrepreneur are critical in dealing with institutional variance.

Keywords. CSR, SME’s, institutional entrepreneurship, institutional theory, resource-based view, case-study research
**Preventing Tragedies: Using Government Procurement and the International Labor Standards to Change the World**

* paper included in Conference Proceedings*

**Author:** Barbara J. Durkin, MBA, JD, Assistant Professor of Management  
School of Economics and Business, State University of New York at Oneonta

**Email:** Barbara.Durkin@oneonta.edu

**Abstract.** The tragedies in Bangladesh in 2012 and 2013, similar to the Triangle Shirtwaist factory fire in the United States in 1911, could have been prevented had the international labor standards been implemented. Despite the promulgation of these guidelines, workplace disasters continue to occur worldwide. Small and medium enterprises (SMEs) no longer operate in a vacuum and are affected by global labor trends. Buyers, as part of their commitment to ensure enterprise social responsibility, are requiring their suppliers, including SMEs, meet criteria related to labor conditions. These organizations must balance their commitment to profitably conduct business and to remain competitive with the need to expand their relationships as business partners in the supply chain. Government procurement contracts have been used by the United States and in other countries to affect social change. The United States government is the world’s largest consumer of goods and services. The American governmental mandates for affirmative action, with their emphasis on goals and timetables for federal contractors and subcontractors, have been instrumental in successfully encouraging equal employment opportunity programs on a large scale. This paper aims to highlight the global trend of corporate social responsibility, focusing on the treatment of employees in countries where materials are sourced or products are manufactured. Existing methods for encouraging SMEs to be accountable for implementing the international labor standards are inadequate. The use of government procurement to change social policy is briefly described, based on a literature review. After rejecting the concept of mandatory compliance, the paper then proposes a mechanism for implementation of the international labor standards modelled on the recommendations of the Kenan Consensus. The use of incentives for government contractors, based on compliance with certified management standards such as Social Accountability 8000 (SA8000), is also explored.

**Keywords.** Supply chain management, corporate social responsibility, small to medium-sized enterprises (SMEs), government procurement, human resource management, labor standards
New self-regulation initiatives to discourage unfair employment practices in the Netherlands

*paper included in Conference Proceedings*

Authors:
Name: dr. Harm van Lieshout
Position: professor of applied sciences in Flexicurity
Organisation: Centre of Applied Labour Market Research and Innovation
Email: h.a.m.van.lieshout@pl.hanze.nl

Name Contact: Anneloes Scholing (LL.M.)
Position: researcher/lecturer
Organisation: Centre of Applied Labour Market Research and Innovation & Hanze School of Law
Email: a.scholing@pl.hanze.nl

Abstract. Unfair competition on employment conditions has negative consequences for different actors. In a race to the bottom to lower labour costs, employers sometimes use dubious labour constructions. Fair employers are at a price disadvantage and will lose market share or even go bankrupt. Workers are underpaid or even worse: they may be a victim of exploitation. And the state loses incomes, as unfair employers don’t pay (full) taxes and premiums for pension and social security systems. In some sectors in the Netherlands, unfair competition has led to such severe problems that parties joined forces and developed self-regulation initiatives, such as a certification system, to combat such dubious practices. This paper examines such initiatives and develops a conceptual framework for their analysis. We will discuss the underlying problem of unfair competition, different recent initiatives of self-regulation that have developed in the Netherlands, and a conceptual frame-work for their analysis.

Keywords. SME; employment; labour market; employment relation; labour standards; employer association; governance; industrial relations; corporate social responsibility
Employees and (in)formal Corporate Social Responsibility (CSR) in Small and Medium sized Enterprises (SMEs)

*paper included in Conference Proceedings*

**Author:** Claire-Isabelle Roquebert, Audencia Group & Nantes University, France

**Email:** croquebert@audencia.com | **Phone** +33 (0)2 40 37 34 52

**Abstract:** This paper studies employees’ reactions to CSR formalization in SMEs. Internal relationships within SMEs remain mostly informal. This informality generates reciprocal processes of trust and gives employees a particular role regarding the implementation of responsible practices internally. As a result, most of SMEs are used to experiencing “CSR” as a set of implicit and informal responsible practices with unspecified obligations. Over the last years, SMEs have been facing rising pressures around the formalization of CSR. Introducing formal policies or practices to govern what was previously accomplished through informality challenges prevailing norms and relationships causing disruption and uncertainty within employees. With the perspective of paradox theory, the purpose of this paper is to explore how employees experience the transition towards greater formalization and to identify the place of informality in newly formalized social responsibility. Through a single case study, we interviewed 17 members (owner, managers and employees) of a SME that has grown and formalized its processes during the last 15 years. This SME was characterized by strong, informal and historical social and environmental values and practices. We identified that the transition towards greater formalization have ambivalent effects on employees and that employees, managers and owner try to preserve proximity and informality threw a range of formal and informal actions. Regarding paradox theory, it appears that instead of a competing duality, formality and informality coexist within CSR and should be considered in relative degrees of a single formality-informality span.

**Keywords:** Corporate social responsibility (CSR), Small and medium-sized enterprises (SMEs), Employees, Informality, Formality
WORKSHOP 1.3  OSH: the individual worker

Chair: Karel-Jan Alsem
ROOM: F2.17

Application of PAOT-OSH programme to SMEs in Korea

*paper included in Conference Proceedings*

Myung-Sook Lee¹, Kee Hong Cho², Kuck-Hyun Woo³, Jae Hoon Roh ⁴

¹APNOH, Ph.D., Secretary-general, Council of Group Occupational Health Service, Korea
²Hy. Ph.D., Director, Federation of Korean Trade Unions, Korea
³MD, Ph.D., Prof. Soonchunhyang University, Hospital Gumi, Korea
⁴MD, Ph.D., Prof. College of medicine, Yonsei University, Korea

Email: lyk3379@hanmail.net

Abstract. The purpose of this study is to enhance workers' awareness of industrial accidents and to stimulate their voluntary activities for occupational safety and health in relation to prevention of musculoskeletal disorder. The project was jointly proceeded by the KIHA and the FKTU with a regional office of the Ministry of Labour in 2009. The project was named “PAOT-OSH(Participatory Action Oriented Training in Occupational Safety & Health) training programme.” The programme was composed 5 steps; Recruitment of participants, Training of trainers & Conduct PAOT-OSH workshop, Follow-up visits to the workplace, Achievements workshop, and Evaluation. The project was carried out 9 months in 2009, 39 SMEs participated. The final results showed that 35(97.2%) enterprises out of 36 enterprises, which had set up safety and health improvement plan at beginning of the project, had carried out the plan and improved one or more items. As a whole 211 items(69.1%) out of 305 items set-up in the plan and had been improved. The enterprises achieved 211 out of those items covering the broad categories of materials storage and handling, machine safety, workstation design, the physical environment, and welfare facilities. Most of the programme participants responded to the survey after finishing the whole programme. They reported that it had been a good opportunity to share practical ideas for improvement. PAOT-OSH training programme yielded encouraging results for SMEs that had been vulnerable to industrial accidents.

Keywords
PAOT-OSH training programme, GOHS(Group Occupational Health Service) Center, SMEs(Small and Medium-sized Enterprises), KIHA(Korean Industrial Health Association), FKTU(Federation of Korean Trade Unions)
Alcohol use among seasonal employees in small businesses at ski resorts

*paper included in Conference Proceedings*

**Authors:** Stig Vinberg¹ and Maria Warne¹

¹ Department of Health Sciences, Mid Sweden University

**Email:** stig.vinberg@miun.se | maria.warne@miun.se

**Abstract:** The paper presents results from a survey aimed at shedding some light on drinking and alcohol-related problems among seasonal employees in small businesses at ski resorts. In total, 292 employees (49% men, 51% women) answered a questionnaire with a response rate of 46%. The questionnaire covered areas as employment relations, social aspects, psychosocial working conditions, health, alcohol consumption and preventive measures. Results were that there are several significant differences between seasonal employed men and women. The women are younger, have more university education, work more less than full-time and in restaurants or hotels and they live outside the ski resort to a higher degree after the winter season. Concerning psychosocial working conditions, health outcomes, hazardous drinking and preventive work at the workplace there are no significant differences between the groups. Around 75 percent of both seasonal employed men and women have a hazardous drinking behavior, which is significant higher in comparison with Swedish studies of other occupational groups. Regression analyses with hazardous drinking (AUDIT) as an outcome variable showed different patterns for seasonal employed women and men, although there are also similarities between the groups. Multivariate regression analyses showed that particularly social aspects as living with other employees and having friends with heavy drinking were significantly associated with hazardous drinking. It is important to reduce the seasonal employee’s alcohol consumption behaviors by influencing attitudes towards hazardous drinking and to change the culture among this group in working life. There is also a need for developing strategies for effective workplace preventive measures and rehabilitation measures for employees with alcohol consumption problems. For small businesses it can be successful to integrate work-related alcohol problems with occupational health and safety issues.

Keywords. alcohol, hazardous drinking, AUDIT, health, seasonal workers
Austria’s solution to ensure OSH support for SMEs / The SME-specific prevention service of AUVA: AUVA-sicher

*paper included in Conference Proceedings*

**Author:** Mag. Barbara Libowitzki | AUVA, national coordinator of AUVA-sicher

**Email:** barbara.libowitzky@auva.at

**Abstract.** Problem statement: Ever since the year 2000 every Austrian company which employs at least one person has to provide healthy and safe working environments to their workers.

As especially for the smallest companies - it is difficult to provide these services the Austrian legislation has therefore required the Austrian Workers Compensation Board (AUVA) to offer these.

**Method:**
In Austria, this legally induced approach to ensuring a nationwide support for SMEs developed in 1999 is called AUVA-sicher.

For 15 years now the Austrian Workers' Compensation Board (AUVA) has been offering a free of charge service for companies with up to 50 workers. This service includes the provision of safety technicians as well as occupational physicians. The SMEs are visited regularly once a year - in 2013 AUVA logged around 110,000 visits by either a safety technician or an occupational physician. (est. market share is 58% of SMEs).

AUVA-sicher follows five strategic goals:
1. Essential reduction of the number of workplace accidents and occupational diseases
2. Time spent in SME depending on the risks
3. Specific subjects and topics
4. Promoting new campaigns for prevention, e.g. skin diseases for hairdressers called “Start!Klar”
5. Promoting innovations
6. Substantial reduction of work-related diseases and awareness raising for health promotion at the workplace
7. Reinforcing the market leadership
8. Increasing the consumer satisfaction

AUVA-sicher is part of AUVA. It is organized in a way that the nationwide coordination is done in AUVA’s headquarter with coordinators in all regional offices (4) and prevention centres (9) in every county of Austria. The field work is done by approximately 270 persons, 75% of which are independent contractors, 25% are staff of AUVA-sicher. Independent contractors are chosen by a defined ranking system, ensuring an impartial way to assess the applicants. The ranking system is defined especially by the factors “education” and the “practical experience”.

The field staff visits the SME, consults on new developments as well as specific problems and leaves the employer with tips and tricks on how to fulfill OSH requirements.

**Results:**
Innovative approaches as well as continual training and a clear quality management approach have ensured that workplace accidents and occupational diseases in SMEs were significantly decreased throughout the past 15 years.

**Keywords.** Austria SME quality solution requirement
WORKSHOP 1.4  Demographic change: a challenge in SMEs in the Horeca sector  
*Chair: Andrea Weimar*  
ROOM: F2.15

The ageing European work force – policy and practice for SMEs - the OSH response

**Author:** Ms. Sarah Copsey | European Agency for Safety and Health at Work (EU-OSHA)

**Email:** copsey@osha.europa.eu

**Abstract.** Problem statement and aim
Europe’s workforce is ageing and Members States are increasing the official retirement age, resulting in a longer working life and therefore increased exposure to any hazards at work. This increases the importance of preventing work from compromising workers’ health. EU-OSHA is carrying out a series of studies running from 2013 to 2015 for the European Commission on OSH in the context of an ageing workforce to support a decision by the European Parliament. The objectives include to: assess the prerequisites for an OSH system to meet the challenges of an ageing workforce; support sharing and exchange of experience and good practice and ensure better prevention for all, and; provide proposals to assist policy development, especially in relation to the needs of small enterprises.

**Materials/methods**

The elements of the study include: ageing workforce and OSH literature review; age, gender and OSH review; EU Member State profiles of OSH policy, strategy and programmes in the context of an ageing workforce; profiles of Member State rehabilitation systems and examples of good practice; examples of good practices by intermediaries and by workplaces. The results from these work-packages will be analysed to put forward evidence-based policy proposals.

**Results**

Preliminary findings suggest: the importance of a holistic approach and a life-cycle approach; the need for access to external services, support and tools for small and micro-enterprises and for their employees and the self-employed; there are many simple actions which could be implemented by small businesses; the need to take account of gender issues. While the issue is a challenge for small businesses, they themselves are usually concerned to retain their longest serving and experienced workers. To gain insight into how to support and advise them, the project examines examples of intermediary support to small enterprises and good practices implemented by small business.

The key to healthier older workers is to improve prevention for all workers, with tailored interventions for individual workers where necessary which are implemented in a sensitive way to avoid stigmatisation of older workers. A robust OSH system is needed to deliver effective prevention, provide access to occupational health services for all workers and promote health in the workplace.

Improved rehabilitation and return-to-work systems are needed. In particular, early-intervention rehabilitation is needed, with more public health resources given to non-life threatening chronic diseases such as MSDs. Work should be a clinical outcome for the treatment provided by medical professionals (doctors, physiotherapists, etc.). Cross-policy actions and budgeting are needed, especially with public
health and social security.

Conclusions/implications

It is the work hazards we are exposed to when young which influence whether we exit the workforce early or become healthy older workers and healthy retired workers. This increases the importance of having effective OSH systems in place which function in collaboration with other policy areas, especially if small businesses are to obtain the support they need.

Keywords. ageing, SMEs, sustainable work, cases, literature reviews, policy analysis
The importance of demographic change for the catering and hospitality industry

Authors: Dipl. Psych. Robert Hemke Smith and Florian Elsaesser
Berufsgenossenschaft Nahrungsmittel und Gastgewerbe

Email: robert.hemke-smith@bgn.de | florian.elsaesser@bgn.de

Abstract. In recent years, the shortage of skilled workers in the sector is becoming increasingly clear (Berufsbildungsbericht, 2014). The proportion of apprenticeship vacancies increased while the proportion of those who drop out of education compared to other industries is very high (BIBB, 2012). New models of recruiting focus on a life-phase-related approach and prefer the aspect of staff retention instead of new recruitment.

In a survey in the project INDIGHO (INDIGHO, 2013) trainees, divided into five occupations of the hospitality industry, were questioned about their education (Elsässer, 2014). The 577 participants (282 female, 283 male, 12 without information about their genders) were on average 20 years old (mean M = 20.46; standard deviation SD = 3.00) and consisted of the following occupations:
- 41.4% cook
- 22.9% hotel expert
- 11.1% restaurant expert
- 13.7% specialist / expert in food service
- 9% professional in the hospitality industry
- 1.9% without specifying

The trainees were obtained at vocational schools for participating in the survey.

Most drop-outs occur at the beginning of training (Schöngen, 2003). Nevertheless 10% of trainees in the last year of training reports in the survey at vocational schools on a maximum inclination demolition. When asked about overtime pay, 62% were "no" or "rather not" satisfied with the payment and 85.2% of respondents reported on working overtime, at which 61.2% had to work 1-5 hours of overtime a week and 12.9% more than 10 hours of overtime a week.

What would the trainees find really good at their company? Most study participants reported (59.9%) on the exchange with the colleagues. To provide the know-how for healthy and successful work for trainees has to been set as a specific task and was implemented in the framework of the research project as a transfer product. The App for young people of the hospitality industry is available under www.bgn-azubi-app.de.

Keywords. demographic change, SME, young workers, hotel and catering sector, full and parttime work.
**The Hotel, Restaurant, and Catering Trade - Design of Demographic Change**

*paper included in Conference Proceedings*

**Authors:** Dipl. Psych. C. Nordbrock\(^1\) and B. Schlote-Sautter\(^2\)

\(^1\) German Social Accident Insurance Institution for the foodstuffs and catering industry  
\(^2\) German Social Accident Insurance Institution for the foodstuffs and catering industry

**Email:** constanze.nordbrock@bgn.de

**Abstract.** The project INDIGHO "Innovation and Demographic Change in the Hotel, Restaurant and Catering Trade" (Horeca) (2012-2015) dealt with effects of demographic change in this sector. Its major objective was to improve the awareness for the present situation and to increase the retention of professionals in the field, while supporting safe and healthy work (INDIGHO, 2013).

**Introduction**

As part of the research project INDIGHO, the age structure of the workforce of 310 Horeca enterprises was collected by means of an online survey between August 2012 and December 2012 (Hemke & Elsässer, 2013). These results were complemented by analyzes using data from the Federal Office of Statistics (Schlote-Sautter et al, 2013).

**Keywords:** Demographic change; SME; employability
WORKSHOP 1.5  How can contemporary office design and new ways of working benefit employees and organizations?

Chair: Mark Mobach
ROOM: F2.14

Always Connected at Work? The Role of Information Novelty and Individual Needs

Authors: MSc. Kiki M.M. de Jonge, Eric F. Rietzschel and Nico W. Van Yperen
University of Groningen

Email: K.M.M.de.Jonge@rug.nl | e.f.rietzschel@rug.nl | n.van.yperen@rug.nl

Abstract. Purpose: The world of work has changed. As a result of new ICT developments, many workers are almost constantly connected to job-relevant information and coworkers, regardless of when or where they are working. However, being connected to one’s work and coworkers through online media such as e-mail, video chat, and online file sharing might be a double-edged sword. Whether workers perceive connectedness favorably or unfavorably will, we argue, depend both on the content of the information received and the needs of the worker. Thus, in this research we study the effects of connectedness by addressing the role of (a) information novelty, (b) need for structure, and (c) need for autonomy.

Workers high in need for structure have a strong preference for clarity and predictability, and are averse to extensive information processing. These workers, we argue, will perceive connectedness negatively (i.e., as decreasing clarity), unless the information received is non-novel and unsurprising. The reason for this is that novel information adds complexity to the task and requires more information processing. In contrast, non-novel information fits their preference for clarity and for stereotypical information, which compensates the negative effects of being provided with extra information.

In contrast, workers high in need for autonomy have a strong preference for being in control of their actions, and are averse to external control. These workers, we argue, will perceive connectedness negatively (i.e., as controlling and interrupting their workflow), unless the information received is highly novel. The reason for this is that receiving non-novel information has no added value for executing the task at hand, leaving only an interruption. In contrast, receiving novel information has value for executing the task, which compensates the negative effects of being interrupted.

Methodology: Three experiments were conducted that manipulated connectedness and measured participants’ psychological needs. During an idea generation task, connectedness was manipulated by providing participants with no ideas, non-novel ideas, or novel ideas. Participants were undergraduate students participating for partial course credits (Study 1 (N = 82), 2 (N = 86), 3 (N = 78)).

Results: We found that the effects of connectedness are contingent on the fit or misfit between information novelty and individual needs. More specifically, the findings of the present studies suggest that the favorable effect of being connected to novel incoming information is weakened when high in need for structure, and strengthened when high in need for autonomy.

Conclusions/Implications: In addition to the experimental manipulation of connectedness, we addressed the question for whom connectedness is likely to be favorable. In order to reap the benefits from new ways of working without incurring the potential costs, the results suggest that organizations moving towards increased connectedness should take workers’ psychological needs into consideration.

Keywords: connectedness, blended working practices, information novelty, need for structure, need for autonomy, experimental design
Evidence based office design and configuration: putting people at the centre of the process. (A Middle East based Case Study)

*paper included in Conference Proceedings*

Authors: Dr Barry Haynes(1) and Nick Nunnington(2)

1 Principal Lecturer, Sheffield Hallam University, UK

PhD MBA MSc(Eng) BSc (Hons) MRICS CBIFM FHEA CEng

2 Visiting Professor, Nottingham Trent University, UK

Visiting Lektor, Hanzehogeschool, Groningen

MBA, BSc.(Hons), MRICS, FHEA

Abstract: The paper explores the continuing problems of lack of engagement, motivation and satisfaction with office environments. It examines why the one size fits all approach of open plan offices is failing and why people must be put at the centre of a “flipped office approach”. Using a case study from the Middle East it examines the application of the authors’ 10 P model and aligned vision. It demonstrates how research and consulting can translate evidence and detailed analysis into strategies, signposts and criteria to inform the office design process. Based upon 20 years of research development, this paper represents a practical exploration of consolidating research themes and evidence into data analytics. The paper will demonstrate how a research methodology has been adapted to collect data in three areas:

- Positive and negative attributes of productivity and their drivers;
- Activity analysis of what individuals and groups do whilst in the office; and
- Connectivity throughout the organisation (Formal/Informal/Social and Virtual)

The paper will evaluate the application of the research methodology within the case study, and illustrate the key findings and how they were translated into design strategies.

The data has been disaggregated to examine productivity aspects in terms of:

- Gender;
- Ethnicity; and
- Generation.

Analysis of the sub groups clearly demonstrates that “one size fits all” open plan offices are inappropriate and indicates the complexity and subtlety of individual and organisational preferences that have to be accommodated within informed office design.

Keywords. Productivity, activity-based-working, ethnography, connectivity and generational preferences.
Towards needs-based work environments

Psychological needs affecting the use and appreciation of activity-based work environments

Authors:
Jan Gerard Hoendervanger, Hanze University of Applied Sciences
Nico W. Van Yperen, University of Groningen
Mark P. Mobach, Hanze University of Applied Sciences

Abstract. Activity-Based Working (ABW) is supported by work environments that combine hot-desking with a variety of workplaces, designed to support different types of activities. While the advantages of these work environments in terms of efficiency are undisputed, their effectiveness with respect to job performance and satisfaction is still doubtful, at least as a one-size-fits-all solution. So far research has produced ambiguous and sometimes contradictory findings, indicating that situational factors (e.g. interior design, organisational culture, implementation process) may play an important role. Such factors cannot explain however, why we see major differences between individual users. Hence, the purpose of this research is to analyse individual differences in psychological needs and their effects on behavioural patterns and workplace satisfaction. Since workplace satisfaction has been found to be related to job satisfaction and job performance, we consider it as an indicator for the effectiveness of an ABW environment.

Repeated measurements were collected, using a mobile application. Participants reported their activities, the types of workplaces they used, and the degree of workplace satisfaction they experienced. They also filled out a questionnaire regarding (among others) their psychological characteristics: need for autonomy, need for structure, need for relatedness, need for privacy and need for competence. Data have been collected at four different organisations, resulting a total of 7457 measurements, reported by 214 participants. These data have been analysed using a logistic regression model.

Data analysis is still in progress; complete results will be available at the USE conference. Preliminary findings indicate significant impact of several psychological needs on the use and appreciation of activity-based workplaces. As expected, people high in need for structure appear to switch less often between different types of workplaces, whereas people high in need for autonomy appear to switch more often. When activities that require a high level of concentration are carried out in open work environments, a high need for privacy seems to predict workplace dissatisfaction, whereas a high need for relatedness seems to predict less negative satisfaction ratings.

Our preliminary findings clearly confirm the general idea that individual differences regarding psychological needs influence both behavioural patterns (choosing and switching between different types of workplaces) and workplace satisfaction. Further analysis of the dataset is needed to deepen and broaden the insights and to reveal the predictive value of these psychological needs regarding the use and appreciation of activity-based workplaces, also in comparison with other factors like activity type and job characteristics.

The aforementioned insights are highly relevant for both researchers and practitioners. The selected set of psychological needs seems to provide a useful framework for future research focusing on individual differences within the broader context of changing work styles and work environments. Such research may contribute to the development of evidence-based workplace theories and concepts that take into account the variety of psychological needs that have to be fulfilled in order to achieve goals regarding job performance and satisfaction. At a more basic level, research that demonstrates the importance of individual (psychological) differences regarding workplace needs may increase awareness within organisations and among users, stimulating them to pay more attention to assessing, discussing and facilitating these differences.
The opinion employees working activity based versus dedicated seating on the added value of their work environment

Authors:
Assistant Professor Rianne Appel-Meulenbroek. Eindhoven University of Technology
Peggie Rothe and Philip van Susante

Email: h.a.j.a.appel@tue.nl | Peggie.rothe@leesmanindex.com | p.susante@gmail.com

Abstract. Problem statement and aim:

New Ways of Working (NewWoW) are popular, both for increasing employee and organisational effectiveness and attracting new talent. Corporate Real Estate management (CREM) aligns by aiming for higher levels of employee satisfaction with the workplace, increased support of productivity and pride of the office with introducing the shared features and facilities of activity based working (ABW). However, lack of proof of desired advantages of NewWoW is feeding a more reserved attitude towards NewWoW. This paper aims to provide evidence for differences between traditional and ABW environments in workplace support of organisational goals as perceived by employees.

Materials/methods:

The Leesman Database is used to analyse employee opinions on workplace support. The data was collected by online questionnaires amongst 47,913 office employees in the period 2010-2014, mainly in Western European organizations. Respondents are split in two groups based on their way of working: Activity based (ABW) or at a traditional, dedicated seat. Statistical tests of differences between both groups provide insight in different added values of workplace management, like workplace satisfaction, productivity, image and sustainability.

Results:

All added values that were tested showed significant differences between both groups. The employees in ABW environments were more positive on all the added values that were included in the questionnaire. First, they were more positive about the support of their workspace for the activities that were important to them. Also, they were more satisfied in general with the features and the facilities of their work environment and with most of the individual features/facilities. Only satisfaction with their desk, chair, personal storage, phone equipment, desk/room booking systems, in-office network connectivity and the ability to personalise was lower than the employees working traditionally. The design of the workspace had a more positive (perceived) impact for the ABW employees on workplace culture, corporate image and environmental sustainability. Further, they agreed more with statements that the design of their organisation’s workspace contributes to a sense of community, creates an enjoyable environment to work in and enables them to work productively.

Conclusions and/or implications:

The results from this analysis provide CRE managers with proof for implementing ABW environments in their office portfolio. Not only do the employees that work flexibly feel better supported in their work by their workplace, they also feel that it better supports general strategic organisational goals like image and sustainability

Keywords. added value, work environment, employee preferences, activity based working, chi square tests, independent samples t-tests
SESSIONS 2.1 - 2.5

WORKSHOP 2.1  OSH: national programs and perspectives II
Chair: Promila Sharma
ROOM: F1.19

CHALLENGING WORKING CONDITIONS OF INDIAN WORKERS WORKING IN SMALL SCALE INDUSTRIES AND PREVENTIVE MEASURES

*paper included in Conference Proceedings*

Authors: Kavita Narwal*, Neha Mehra*, Preeti Singh*, Tulika Khera* and Promila Sharma**
Ph.D. Scholars* and Professor**
G.B.Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, India

Email: kavi.narwal@gmail.com | neha90.2407@gmail.com | Preetusingh36@yahoo.com | tulikagbpuat@gmail.com | Promila34@gmail.com

Abstract. Small scale industries are the backbone as source of livelihood for Indian families. A large population of India is totally dependent on small scale industries as a ventures to create income for the families. Small scale industries are growing like mashroom in India. Hence population think nothing more than small scale industries as a easiest setup to generate income. Small scale industries are seen at following levels-

a) At domestic level
b) Family level
c) Organizational level
d) Governmental and Non- Governmental goverend levels

At domestic level such industries are run by the individual family in their own residence or related areas. At family level relatives of a family join together and setup a unit of venture. Besides this there are several popular personalities who are known for creating and managing commercial units. They setup ventures and accommodate workers. The last type of small scale industries are managed by the governmental and non- governmental organizations. In India the three major areas where small scale industries are seen at three levels are i.e. in the residence, separate unit and units governed by governmental and non- governmental organizations.

Efforts were made to study the existing of small scale industries of different levels, status of workers, health of the workers, problems faced by the workers, injuries and accidents among workers and to think about the strategies to safegarded the workers in such industries for this workers working as backsmith workers, workers in tourism and hospitality, women workers in handicraft industry and workers in restaurants were selected.
OCCUPATIONAL HEALTH AND SAFETY LAWS IN TURKEY

*paper included in Conference Proceedings*

Authors: Lecturer Yusuf Tahir Altunci and Mehmet Besiktas  
Suleyman Demirel University  
Email: yusufaltunci@sdu.edu.tr | mehmetbesiktas@gmail.com

Abstract. With globalization, dangerous industries established in developing countries affect these countries' workers' health negatively. Similarly, the costs result from work accidents and occupational diseases lead to huge losses in terms of national economy. Within these two cases, the concept of work-related health problems arises. Work-related health problems are one of the most important problems of people who are economically active (employed) in order to generate income or to contribute household income during the reference period or during a particular period of their life as paid, regular or casual worker, for their own account, unpaid family worker, or the employer. Countries, determine the standards that should be considered as work-related health problems according to their conditions. In Turkey, occupational diseases' classification is made in the Social Security Health Procedures Code. In this context; occupational health and safety right is a right arising from the nature of social state that constitutes an important step in the realization of the occupational health and safety regulations, and right to life and health. Therefore; countries must implement the necessary sanctions on issues like the creation of laws and regulations in terms of social responsibility; preservation of nature and the environment, prevention of the exploitation of workers and prevention of child labor. In this way, businesses know clearly and notably what is expected from them. Thus they can attempt to go a step further forward in the direction of business line. As in all over the world, in Turkey inadequacies and issues in working life can also cause occupational accidents and work-related health problems. 99% of the working places in Turkey consist of business which employ less than 250 employees, 84% of employees are hired in these working places[1]. The noteworthy case is that work accidents still occur in these working places. As it can be understood from these data, occupational accidents are common in all sectors in Turkey, regardless of the distinction large or small business, public or private sector, but compared with other sectors, number of accidents, the accident frequency rate, accident severity rate, death and the high injury rate is high in construction, mining and metal industries. It can be said mining, metals and construction sectors are almost in a race in terms of occupational accidents. In 2011, 570 workers in the construction sector, 119 workers in the mining sector, 129 in the metal sector and 34 workers in the textile sector lost their lives. In 2012, 256 workers in the construction sector, 44 workers in the mining sector, and 48 workers in the metal sector lost their lives. In 2014, it was reported that 301 workers died only in mining accident in Soma[2]. Meanwhile, the highest number of fatal occupational accidents with 781 people in 2009 appears in "unknown" category and that reveals serious shortcomings in the SGK data[2]. Particularly, such fatal accidents occurring recently have increased the importance of the necessary legal measures that should be taken. In order to eliminate this kind of problems in Turkey "Occupational Health and Safety Law" was enacted on 1 January 2013. Through this law, the protection of workers' health from hazards in the workplace and encounter of workers' a problem arising from the workplace is tried to avoid. That work is not only limited to the protection of workers from risks in the workplace, it also aims to protect the health of employees as a whole person. In other words, it is aimed to build occupational health and safety awareness and culture. In this study, the legal provisions of occupational health and safety laws being applied in Turkey have been discussed in the framework of research findings, on the other hand the importance of the legal provisions and research topic is highlighted.

Keywords. occupational health and safety in Turkey, legislation, the work-related health problems
An Investigation Report of Potential Chinese Consumers on the Cognition of European Brands

*paper included in Conference Proceedings*

**Authors:** Professor Zhang Shuting¹, Assistant Researcher Lv Yandan², Junior Researcher Dong Yan³, Associate Professor Zheng Suhui⁴

¹ School of Economics and Management Communication University of China
² School of Economics and Management Communication University of China
³ School of Advertising Communication University of China
⁴ Graduate School of Management Communication University of China

Professor Zhang Shuting
President, School of Economics and Management & Graduate School of Management, Communication University of China
Dean, China-Europe Brand Research Center
E-mail: zst@cuc.edu.cn

Zheng Suhui
Associate Professor, China-Europe Brand Research Center
Vice President, Graduate School of Management Communication University of China
E-mail: zhengsh@cuc.edu.cn; 1317408685@qq.com

Lv Yandan
Assistant Researcher, China-Europe Brand Research Center,
School of Economics and Management Communication University of China
E-mail: lvyandanbbi@126.com

Dong Yan
Junior Researcher, China-Europe Brand Research Center,
Doctoral Candidate, School of Advertising Communication University of China
E-mail: dongyan425@163.com

**Abstract:**

Since the prevalent implementation of Chinese reform and opening policy and the development of Information Technology (IT), the younger generation of Chinese consumers have enormously changed their consumption attitude as well as the channels they are exposed to the media. These result in big changes on their cognition towards European brands as compared to the past. Through empirical survey and in-depth interview, this research focus on the investigation of the Chinese young consumers’ cognition towards European product and brand image. The youth targeted in this research is the university students from 18 to 22 years old as they are the typical representation of potential consumers towards brand cognition. This report will study the comparison of consumers’ cognition towards the brands from the United States of America, Japan, Korea and etc. Besides, a comparison based on the investigation which was conducted by our research team in the year 2000 entitled, “National image and brand association” is made, in order to examine the current potential Chinese consumers towards the changes in European brands’ awareness and its factors.

**Key words:** European brand  Potential consumers  Brand cognition
WORKSHOP 2.2  Workplace Innovation among SMEs

*Chair: Jac Christis*

ROOM: F2.13

**Lowlands Sociotechnical Design Theory and Lean Production**

*paper included in Conference Proceedings*

**Authors:** Jac Christis* en Erik Soepenberg

*Dr. J. Christus, Hanze University of Applied Science Groningen

**Email:** j.h.p.christis@pl.hanze.nl

**Abstract.** Lean Production (LP) can be regarded as a design approach in search of a theoretical foundation. In this paper we show that Lowlands’ Sociotechnical Design Theory (STSL) could function as such a foundation. To reach this goal, we first describe STSL as a system theoretical reformulation of Original Sociotechnical Theory (OSTS). Then, we introduce the Toyota Production System as the origin of LP and the challenge it poses for the academic field of organization design. This academic field should (1) assess LP’s success, (2) generalize it by embedding it in more abstract concepts and theories in order to be able to (3) re-specify it for different manufacturing and non-manufacturing contexts. Next, we give an exposition of STSL as a structural design approach based on developments in system theory. At last, we reformulate lean production in STSL terms and so show that LP is a subcase within the more general theory of STSL. We discuss the merits of both approaches and clarify some misunderstandings of lean both outside and inside the lean community. Embedding LP in the more general language of STSL should enable us to discover similarities and differences, to start a process of mutual learning, to integrate diverse design approaches in a theory of organizational design and to add content to redesign proposals of for example the health care system as proposed by Porter and Teisberg (2006) and Christensen et al. (2009). We quote extensively from the lean literature (to convince our sociotechnical friends) and embed both STSL and LP in the broader literature on organization design. We hope this adds a new perspective to the one given in the Operations Management literature on LP. Again, mutual learning is the goal.

**Keywords.** Lean Production, STSL, OSTS, innovative enterprise, workplace innovation, healthy jobs, mutual learning
Total Workplace Innovation - The paradigm that will change (fast) growing SME’s (… and our economy)

Author: Geert van Hootegem

Description. In his presentation Van Hootegem will demonstrate that (fast) growing SME’s are the key players in transforming the current economy. In the past fast growing organizations opted for a functional work organization. It was their disruptive change. As long as productivity and quality performance criteria were dominant, this was an adequate and performant answer towards the growth of the company. Today this answer has become obsolete. Today companies drive in a VUCA-world, an environment that can be characterized as volatile, uncertain, complex and ambigue. A functional work organization in such a world can only lead towards malfunctioning (little) bureaucracies, looking for the utopia of rules. Instead, our fast growing SME’s should clone themselves into subunits, or in other words, mini-companies dedicated to subsets of orders. If our (fast) growing SME’s shift from a functional towards an order based work organization they will secure the fundaments for an economical transformation.
**Sociotechnical evaluation of alternative and innovative shop floor control systems**

*paper included in online Conference Proceedings*

**Author:** Jannes Slomp

Lectorate Lean/World Class Performance, HAN University of Applied Sciences
Ruitenberglaan 26 | PO Box 2217, 6802 CE Arnhem

**Email:** jannes.slomp@han.nl

**Abstract**

In this paper we present a sociotechnical evaluation of three new, and alternative shop floor control systems. The three alternative systems concern the application of:

- POLCA, a card-based system to connect semi-autonomous cells;
- LPS (Lean Planning System), a detailed scheduling system to guide the flow of work in a low-volume/high-variety system;
- The CONWIP/FISFOS/TAKT system, a system which limits the amount of work at the workfloor and only indicates priorities on job order level.

We show how sociotechnical principles can be used to assess alternative shop floor control concepts. Concurrently, we discuss workplace innovation by means of the alternative shop floor control systems.
Designing a prevention approach suitable for small enterprises

*paper included in Conference Proceedings*

**Authors:**
Patrick Laine, Attached to Management of INRS headquarters ¹
Marc Malenfer, Project Manager in INRS ¹

¹ Institut National de Recherche et de Sécurité, 65 boulevard Richard Lenoir, 75011 PARIS.

**Email:** patrick.laine@inrs.fr | marc.malenfer@inrs.fr

**Abstract.** 98% of firms coming under the French general social security scheme employ fewer than 50 employees. Although small enterprises do not see risk prevention as a priority, the statistics show without doubt that the majority of occupational accidents occur in such small businesses in many sectors of activity. How can we raise their awareness and encourage them to prevent occupational risks? By implementing appropriate approaches based on a better knowledge of SMEs and by collecting their needs, their interest for OSH issue becomes stronger. These approaches, usually used in marketing, reduce the gap between the weaknesses of the OSH competences of SMEs and the requirements for occupational risk prevention.

**Keywords.** targeted approaches, occupational safety and health, risk prevention, OSH competences, OSH requirements
Voluntary safety management system in SMEs - does OHSAS18001 certification help?

*paper included in Conference Proceedings*

**Authors:** K. Reinhold¹, Õ. Paas¹ and P. Tint¹
¹Institute of Business Administration, Tallinn University of Technology

**E-mail:** karin.reinhold@ttu.ee

**Abstract.** Occupational risk prevention can be managed in several ways. Voluntary safety management standard OHSAS 18001 is a tool which is considered to contribute to effective risk management in the manufacturing industry. This paper examines benefits of OHSAS 18001 based on the statistical analysis. The MISHA method is used for safety audit in 16 Estonian small and medium sized enterprises. The results provide the objectives why companies implement or wish to implement OHSAS 18001, identify differences in safety activities for three types of companies and determine correlations between different safety activity areas. This information is valuable for enterprises who wish to improve their safety activities via voluntary safety management system.

**Keywords.** safety audit, OHSAS 18001, safety performance, MISHA method
Total Safety Management for SME

*paper included in Conference Proceedings*

Authors: M.C. Leva¹, N. Balfe¹, T. Kontogiannis², Marko Gerbec³

¹Centre for Innovative Human Systems, Trinity College Dublin, Ireland
²Department of Industrial Engineering, Technical University of Crete, Greece
³Jozef Stefan Institute, Jamova 39, 1000 Ljubljana, Slovenia

Abstract. This paper describes the TOSCA approach to safety management and three test beds illustrating their application and potential benefit to SMEs. The focus of the TOSCA approach is on improving the information available for safety management and providing improved methods of sharing this information across an organisation. The first case study describes a participatory approach to assessing an activity, the second a risk register for collecting and analysing risks across a business over time, and the third a simulation approach to designing complex procedures. Finally, the specific safety and productivity related gains from applying specific methods and tools are illustrated.

Keywords. TOSCA, total safety management for SME
WORKSHOP 2.4  **Special Session: Media in Prevention**  
*Chair: Martina Hesse-Spötter*  
*ROOM: F1.23*

“**Media in prevention**”

Film – an effective tool to get the prevention message across  
Author: Martina Hesse-Spötter, Secretary General of the Section “Electricity” of the ISSA; Cologne, Germany

**Content Description**

We continue to stress that most accidents are caused by human error. Therefore, our aim is to have a sustainable impact on individual behaviour. We want everyone to work safely and to protect himself against risks; that he wears a helmet, uses ear protection, respects rules and so on. A very demanding task!

In a similar manner encouraging us to buy certain products, we want to influence human action. We are promoting safety. So the same rules apply to us as to advertisements.

Communication is a key element for successful prevention. Films can be used as an extremely effective medium for the advertisement of more safety and health at work.

There is an international event in order to provide a worldwide overview of existing films on occupational safety and to give a forum for new ideas.

Within the framework of the World Congress for Safety and Health at Work, which takes place every three years, the “Electricity” Section and the “Information” Section of the International Social Security Association, ISSA, invite participants to the International Media Festival for Prevention (IMFP). Today, not only films can be submitted but also multimedia products.

The last festival took place in 2014 on the occasion of the World Congress on Occupational Safety and Health at Work in Frankfurt. With 286 contributions from 33 countries, a new record number of submissions could be achieved.

The high number of films shows that despite rapid developments in the media world, films still maintain a strong position – nowadays often supplemented by other media within the scope of a single campaign.

“A picture is worth a thousand words.” Within the shortest period of time, pictures convey a huge amount of information that can remain in our memory for a long time. The perfection of modern production technologies even intensifies this effect. We’re fascinated by moving images.

The pictures shown and stories told in films can evoke strong emotions in us. We identify with the actors and share their joy and pain.

Compared to pure texts, moving images have a decisive advantage in our globalized world. They overcome language barriers and state boundaries. Even if we don’t understand the language, the information provided by the images enables us to understand the prevention message.
In the workshop, we will discuss on the basis of examples, what makes a good film. We will get a worldwide overview of film productions dealing with occupational safety and health.

Since 2014, the ISSA Electricity Section has provided a website (http://www.issa.int/mediafestival2014) with all productions submitted to the last festival. It is possible to sort them by issue, language, sector or style and thus to search for a specific production matching the relevant issue.

Film is a very suitable medium for small and medium-sized enterprises. Many good productions are freely available on the internet or they can be purchased for a small fee. These simple and cheap access possibilities make the film an ideal medium, especially for SMEs.
Supporting Smartly – Utilizing online media to meet OSH requirements in Austria

Author: Cornelia FROESCHL, AUVA – Austria
E-mail: cornelia.froeschl@auva.at

Problem Statement: The legal framework determining the working conditions in Austria is a complex system. Therefore, companies of all sizes and industries are required to put a certain amount of effort into adopting the specific regulations regarding occupational safety and health.

The majority of Austrian workers are employed in small or medium sized companies, consisting of up to 50 staff. Theses SMEs offer seven out of ten job positions throughout all industries and regions.

As it is even more challenging for small and medium sized companies to address organizational safety and health issues with limited resources in terms of staff, time and training, the Austrian Workers’ Compensation Board (AUVA) and the Social Partners decided to offer a set of online tools on the digital platform www.eval.at. These tools are designed to support enterprises in meeting the legal requirements concerning safety and health as well as to provide knowledge in the area of occupational safety and health.

Method: The platform www.eval.at has originally been launched in 2002, supported by the Social Partners (representing employers and employees in Austria) and aiming to facilitate information regarding the obligatory evaluation of workplaces in terms of possible threats to the workforce’s safety and health. The core information consists of 460 draft papers, containing the key factors of various workplaces in different industries. These draft papers are offered to the companies’ occupational safety and health experts free of charge and need to be adapted to the specific situation of each organization.

In Austria, it is the legal obligation of the company owner to evaluate each workplace throughout his/her business regarding any negative effects the occupation could probably have on the staff.

Furthermore, the Austrian Workers’ Safety and Health Promotion Act, which is the core of all legislation regarding occupational safety and health in Austria, has been followed by specific regulations in various fields, e.g. laws regarding personal protection equipment, noise and vibrations, general regulations for buildings and many others.

The AUVA decided to support especially small and medium sized companies in fulfilling their legal obligations by designing and launching a set of online tools. The main idea behind every tool is to either

1. enable the organization to keep track of the obligatory documentation in a respective field or to
2. give the organization the possibility to explore the level of strain or exposure imposed in the staff in a certain field.

Results: The current set of tools based on online media at www.eval.at supports organizations to clarify the current level of threats and risks in terms of occupational safety and health. Based on that self-assessment, adequate measures to reduce negative impacts on the individual worker’s occupational safety and health can be arranged. As the key success factor in improving the safety standard is effectiveness, the AUVA identified the advantages of online media at an early stage. Online platforms offer easy access for small and medium sized companies and the chance to launch an actual tool instead of just another piece of information.
WORKSHOP 2.5  **Special Session: The cultural dimension of theory**  
*Chair: Iekje Smit*  
*Location: Appel Including speech Geert Hofstede*

**The cultural dimension of theory**  
“When Strategy and Culture clash, Culture always wins”[1]

Author: Iekje Smit - Hanze University of Applied Sciences, Groningen The Netherlands  
Consortium Chair Geert Hofstede Consortium

Content description - Abstract

This workshop wishes to address the question of the importance of culture as a determinate in theory and practice. Starting point is the Geert Hofstede’s Model of Cultural Dimensions in relation to a research on business goals of MBA students around the world[2]. Outcome of the research was that these goals differed considerably across nations and these differences could be described in terms of cultural dimensions. Therefore, companies and organisations looking to going abroad, need realize that theories cannot be transferred across cultures. The question remains time and time again: what does this imply for practice and which ‘standard’ mistakes do we all make?

1. **Maslow has left the building**

Geert Hofstede’s Model of Cultural Dimensions has been starting the starting point of considering culture as a determining factor in organisational behaviour, and subsequently the achievement of organisational goals. This is true across the board: at a personal level as well as a societal level.

Hofstede’s iconic example of the pyramid of motivation by Abraham Maslow:  
- But what he said is that human motivation comes in levels  
  - there are lower levels and higher levels  
  - The lower level is for example the need for food and cover  
  - and that is necessary that the lower levels are satisfied before the higher levels can enter

- But the peak level in the Maslow’s pyramid is …self-actualization  
- That is typically an idea for individualist society  
- A society where the individual is the ultimate purpose of existence to become an independent individual and to actualize oneself

- But the majority of people in the world do not consider themselves as individuals but as members of what I call an in-group  
- Their relationship to the people around them are an essential part of their existence

- So in such society the idea of self-actualization doesn’t fit  
- What you actualize is not yourself but it is the in-group to which you belong  
- It is in-group actualization[3].

- So it can even mean that a number of the members of an in-group have to efface themselves in order to further the actualization of their in-group

- So that is a theory that does not appeal worldwide although it is sold in management courses in countries like China as being universal, it is not.
What applies to Maslow, applies to other theories, but it seems as if this is the elephant in the room. Everyone feels it’s there, but no one talks about it.

2. Seven deadly sins in a multi-cultural world

The European Union only recently opened European small business portal This portal gathers together all the information provided by the EU on and for SMEs, ranging from practical advice to policy issues[4], but it does not include any type of cultural information. Not taking this into consideration opens up the flood gates of disaster. But understanding and taking culture into consideration is easier said than done.

Hofstede defines what he speaks of the “Seven deadly sins in a multi-cultural world”[5] that demand our attention: unawareness, ethnocentrism, amnesia, professional myopia, conceptual mix-up, academic polemics and level confusion. These are 7 deadly sins that politicians, academics and business people alike fall prey to.

What does this mean in practice though?

Fons Trompenaars[6], intercultural management consultants speaks of “reconciling dilemma’s” as the main ingredient for leadership. Given that we all see the benefit of diversity and we all understand that culture is the “a nuisance at best and more often a disaster”[7], it is important to find ways to reconcile differences between cultures by combining opposites. A hard nut to crack. Because awareness is a must and a first step, we will all carry out a cultural test: where do you stand?

References

[5] Film is on YouTube: https://www.youtube.com/watch?NR=1&v=AM5NjIar5ec
[7] Geert Hofstede

Speech: Cross-border communication skills for small entrepreneurs

By: Professor Geert Hofstede

Small entrepreneurs without international experience who wish to reach out across national borders – for example through digital products – may run into cultural problems, and benefit from training in cross-cultural communication skills. The workshop deals with basic concepts for this kind of training.
SESSIONS 3.1 – 3.5

WORKSHOP 3.1 OSH: sector level studies 1
Chair: Sisse Grøn
ROOM: F1.19

Pesticides use in apple production in Québec: Addressing OHS issues from the perspective of SBs research.

Authors: Ph.D. Danièle Champoux, Caroline Jolly and Ludovic Tuduri - I.R.S.S.T.

E-mail: champoux.daniele@irsst.qc.ca | jolly.caroline@irsst.qc.ca | tuduri.ludovic@irsst.qc.ca

Abstract. Pesticides use in Québec agriculture has raised environmental concerns, but in the absence of compensation statistics, agriculture has not been a priority for OHS research and intervention. International research on OHS risks and need for adapted PPE is behind new research. Pest pressure is intense in apple production, a major crop in Québec. The majority of orchards are family operated, with owners directly involved in pesticide use.

Exploratory research combining three perspectives with a population survey, interviews and observations in a sample of 15 orchards, has documented the context and content of practices related to pesticides and PPE use among apple growers. SPSS, NVivo and OBSERVER software have been used for analyses.

Parallels can be made between primary OHS prevention and the reduced and targeted use of pesticides in integrated fruit production. Interviews document a significant culture change and the evolution of pesticides use practices over the course of 20 years. However, cumulated constraints on producers, including growing pest pressure, climate change, globalization, time constraints and uncertain returns at the end of the season, to which small producers are highly vulnerable, frequently result in compromise practices. These include spraying even when wind is high, using maximum doses and eradicating vs preventive products, mixing products to cut on the number of sprayings.

Whereas grants have been made available for the environment-friendly drift-reducing sprayers, the purchase of the expensive closed cabs used for spraying, the sole piece of collective protection equipment used in orchards, is not funded. Observations reveal one producer out of three does not own a closed cab for spraying and that cabs in use are not all safe. There are no norms for cabs and information on filter selection and replacement is imprecise.

Interviews, observations and activity analysis reveal a large number of operations where prevention must rely on personal protection (respiratory protection, protective clothing, gloves, boots). Dermal exposure, underestimated by producers, is important in a large number of situations. During mixing, for instance, it is linked to storage and site development, product and equipment characteristics, and ensuing work practices. Use of PPE is generally low and can vary widely in identical exposure situations; insufficient and ambiguous information about risk and required PPE on product labels is noted.

Relative invisibility of OHS problems tied to pesticides use, the isolation and vulnerability of small producers and the absence of an active OHS network are familiar elements within the SBs research perspective. While arguing relative risk might not be so bad, producers express uncertainty about the health effects of
products, exposure routes and protection, and point to lack of knowledgeable information sources, and time and financial constraints.

Considered research and transfer strategies include more research actively involving producers and their representatives, and networking with the highly credible agronomists and regional technical clubs providing production counsel to investigate their potential as OHS intermediaries and knowledge transmitters. Other coming developments include collaboration with an international consortium for the development of adapted protective clothing and discussion with regulatory agencies concerning product labels.

**Keywords.** pesticides use, PPE, small apple orchards, multiple methods
Farming in transition: How do Norwegian farmers interpret and approach new workplace risks?

*paper included in Conference Proceedings*

**Authors:** Kari Kjestveit, PhD-fellow (a b)
Kari Anne Holte, PhD (b)

a) Faculty of Social Science, University of Stavanger, Norway
b) Department of Social Science, International Research Institute of Stavanger, Norway

**Introduction**

Email: kari.kjestveit@uis.no | kari.anne.holte@iris.no

**Abstract.** Farming is one of the most dangerous occupations worldwide, with a high risk of accidents and injuries. It implies a high degree of physical and manual work, and work tasks involve use of machinery and handling large animals. Major differences may be found in how agriculture is organized and performed, due to structural, cultural, and economic differences cross nations and continents. Study context is therefore of great importance in discussions of risk and prevention. Norway holds the history of a nation’s journey from poor, agricultural-based, and half-industrialized, to a rich country whose industry is based on specialized technology and high competence. Norwegian agriculture has been dominated by small farms, where family members in all generations participate in the work. Industrialization and changes in social structure made it more common for one spouse to have a paid job elsewhere. At the same time there is an ongoing transition towards fewer, larger, and more efficient farms. Less work hours are spent in this sector, though production level is stable. Additionally, political interests aim for a more industrialized and “professional” agriculture. This transition entails new requirements regarding investments, new technology, and work organization. This may further give consequences regarding occupational health and safety. The aim of this study is to explore the farm as a work organization and how farmers interpret and approach a tentative new risk picture, due to the change in societal and political interests.

**Keywords.** agriculture, industrialization, occupational health and safety, risk perception, management
**Drivers’ opinions concerning working conditions in forest fuel production**

*paper included in Conference Proceedings*

**Authors:** PhD A. Hedlund\(^1\) and I-M. Andersson\(^1\)
\(^1\) Work Sciences, Dalarna University

**Email:** ahd@du.se | ima@du.se

**Abstract.** Forest fuel production is a sub-branch in forestry that has increased during the last decade, both in Sweden and in other parts of the European Union (EU). Forestry is a risky branch and knowledge about working environment conditions in forest fuel production is limited. The aim of this study is to raise knowledge about drivers’ opinions concerning working conditions in forest fuel production. A questionnaire was answered by 34 drivers. The drivers experience their work as risky. They use personal protective equipment to different degrees in their daily work. Cut damage and slipping are the most common accidents and incidents. Most of the drivers experience the mental and the physical workload as low or moderate. Regarding the findings in this study, two main work environmental issues can be raised: The drivers experience major problems outside the cabin compared to inside, which increases the risk that they stay in the cabin during most of the workday. The new work tasks within forest fuel production may increase the fact that forestry is one of the most risky branches.

**Keywords.** Forest fuel production, questionnaire, work environment
WORKSHOP 3.2  How SMEs organise competitive advantage
Chair: Gert Walhof
ROOM: F2.13

Tool for Identifying Critical Control Points in Embedded Purchasing Activities in SMEs

*paper included in Conference Proceedings*

Authors: Geoffrey Hagelaar, Anne Staal, Richard Holman, Gert Walhof(2)

Abstract. The paper discusses risk and uncertainty aspects and proposes an assessment tool leading to identification of critical control points (CCPs) within purchasing-oriented activities of small and medium enterprises (SMEs). Identifying such CCPs is the basis for developing SME purchasing instruments to support purchasing-oriented activities. The identification of such CCPs will be theoretically approached from a systems perspective using four management functions which are needed to operate as a viable system: implementation, control, intelligence and coordination. When applied to the development of purchasing instruments, these instruments can be used for supporting one of these four management control functions. Key words Small-Medium Sized Enterprises (SMEs); purchasing-oriented activities; critical control points (CCP).

*paper included in Conference Proceedings*

**Authors:** Anne Staal, John Tookey, Jeff Seadon, Mark Mobach, Gert Walhof

- Anne Staal, BENG MA DMS MBA, doctoral researcher & lecturer at Auckland University of Technology (NZ), senior lecturer at Hanze University (NL). Corresponding author. astaal@aut.ac.nz.
- Dr John E. Tookey, MCIOB, MIEEE, Professor in Construction Management at Auckland University of Technology (NZ).
- Dr Jeff Seadon, senior research fellow at Auckland University of Technology (NZ).
- Dr Mark P. Mobach, Professor in Facility Management Centre of Research & Innovation for Built Environment Hanze University (NL). Gert H. Walhof MBA, Professor in Purchasing Management Hanze University (NL).

**Abstract.** Construction industries in New Zealand and abroad have a low track record for successful sustainable innovations. This often has a negative impact on private and government spending, and on quality, society and the environment. This paper posits that the construction industry needs step-change (i.e. architectural, system, radical, modular) environmental technical innovations to make drastic improvements.

Often entrepreneurial or small to medium-sized firms at the beginning of supply chains or from other industries will introduce such innovations. These firms will use the innovation capacity of suppliers and of their own organisations to transform and commercialise such innovations into the industry. However, after an extensive literature review it remains unclear how innovative New Zealand firms procure environmental step-change technical innovations for the construction industry.

The research focuses on procurement activities within such firms who supply the New Zealand construction industry. These procurement activities interact with (internal and external) innovation activities for an optimal firm performance (in economic and environmental terms) and are affected by clusters of internal and external variables.

The heart of the research consists of two rounds of case studies alternating with two rounds of collaborative focus studies. The research focus is on New Zealand although part of this study will be replicated in the Netherlands. It is part of a doctoral project.

**Key words.** Construction industry, building industry; entrepreneurs, small firms, SMEs; New Zealand; step-change technical innovations; procurement, purchasing; sustainable, environmental.
The Nature of Embedded Purchasing Activities in SMEs: results from a Dutch multiple case study

*paper included in Conference Proceedings*

**Authors:** Geoffrey Hagelaar, Anne Staal, Richard Holman, Gert Walhof(2)

**Abstract.** Aims: identify and explain purchasing-oriented patterns in Small and Medium Sized Enterprises (SMEs) via case study research. Scope: Using a conceptual framework and empirical research this article proposes a series of purchasing-oriented patterns in SMEs. These patterns align activities to achieve the SMEs proposed value proposition towards customers and activities to purchase resources needed for realizing the value proposition. Structure: This paper introduces the research topic. It discusses a conceptual framework and theory. It then continues with the methodology to collect and analyse case study data and describes empirical finding. It discusses these findings related to the framework and literature and ends with summarizing first conclusions. Conclusion: The SMEs in the dataset use four types of purchasing-oriented patterns related to their customer value propositions. These SMEs can strive for low transaction costs can but invest in extrinsic product attributes to realize their value proposition. Both the transaction cost theory and the resource based view help to explain the purchasing-oriented patterns. Further research is needed to strengthen and validate findings.

**Keywords.** Small-Medium Sized Enterprises (SMEs); purchasing-oriented activities; case studies.
**SMEs cooperate to meet social procurement conditions**

*paper included in Conference Proceedings*

**Author:** Dr. L.L.M. P. Oden*
*Hanze University of Applied Sciences

**E-mail:** p.a.t.oden@pl.hanze.nl

**Abstract.** A growing amount of (semi) public organizations in the Netherlands write tenders with mandatory social conditions. It is important for SMEs to focus on social procurement in their business strategy. SMEs should be proactive and try to affect the conditions (semi) public organizations write in their tenders. On the other hand, (semi) public organizations should facilitate SMEs by developing transparent procurement processes and by organizing information meetings with SMEs. The most important factor for an effective social procurement procedure seems to be the dialogue between SMEs, purchasers and the persons responsible for matching target groups. Because it seems easier for SMEs to meet social procurement conditions if they cooperate with other SMEs and set up labour pools, we performed an exploratory research on the formation of labour pools. The labour pools can be set up by SMEs in the same branch or in a cooperation chain. Our research shows that entrepreneurs require a lot of perseverance in developing a labour pool. It also appears that labour pools without commitment of public authorities are not effective.

**Keywords.** SME’s, socially responsible procurement, cooperation, focus groups
WORKSHOP 3.3   Healthy Ageing & Work
Chair: Leni Beukema
ROOM: F2.17

HRM bundles and employee outcomes: Opening the black box The roles of job demands and job resources

Authors: MSc. Klaske Veth, Hanze University of Applied Sciences
Co-authors: Hubert P.L.M. Korzilius and Beatrice I.J.M. Van der Heijden

E-mail: k.n.veth@pl.hanze.nl

Abstract. Purpose - Using the Job Demands-Resources model literature and the social exchange theory as a theoretical framework, we examined the effects of perceived job demands (i.e. mental load, emotional load, and pace and amount of work) and perceived job resources (i.e. independence, learning opportunities, variety of work, social support from supervisor, and from colleagues,) as potential mediators in the relationship between used bundles of Human Resource Management (HRM) practices and employee outcomes (i.e. work engagement, employability, and health). In addition, we tested for significant mean age differences in our research model.

Design/methodology/approach - A cross-sectional design was used. We collected self-reported data through an on-line questionnaire from 1,121 respondents from one profit, and two not-for-profit organizations in the northern part of the Netherlands.

Findings - Results from the factor analyses and measurement models comparison supported the hypothesized original 2-factor structure of HRM practices. Structural Equation Modeling analyses showed two distinct processes, in terms of mediation, from the distinctive maintenance and development HRM bundles. Maintenance HRM related directly negatively to employee outcomes. Conversely, the results of the use of development HRM confirmed our hypothesized mediation model, however, the moderating effect of age was not supported with these data.

Originality/value = This is the first study that investigated employees= use of HRM bundles influencing job demands/resources that, in turn, affect employee outcomes. Further, we examined whether there are significant age differences in the aforementioned relations.

Keywords. Human Resource Management (HRM), HRM Practices, HRM Bundles, Employee Outcomes, Work Engagement, Employability, Health
To live or to survive in organizations. Understanding of the collective relationship dynamics operating in a traumatized organizational system. An action research case study.

Authors:
- Cécile L.I. Oosting, Hanze University of Applied Science Groningen Institute of Business Administration, Department of Human Resource Management, The Netherlands
- Dr. Leni M. Beukema, Hanze University of Applied Science Groningen Institute of Business Administration, Department of Human Resource Management, The Netherlands
- Arie de Ruijter, Tilburg University, School of Humanities, The Netherlands
- Leo Witvliet, Nyenrode Business University, Division Interim Management, The Netherlands

Abstract. Various bodies of literature attest to how devastating events such as violent personal assaults, accidents, major change in (work)life can damage the relational dynamics in organizations. Some organizations heal from the devastating event, some even show patterns of posttraumatic growth, but some develop unhealthy and ongoing dysfunctional patterns of behavior leading to longer-term performance problems. Like individuals, organizations can be traumatized. The organizational characteristics and strengths can mitigate or exacerbate the effects of trauma. Our special interest is into what extend the intervention method organizational constellation adds value to enhance organization health as it is being diagnosed as traumatized. An organizational constellation is a method that expose the relationship dynamics within the organizational system. It helps to analyze and understand the relationship dynamics in the organization. The purpose of this paper is to give an up-date about the research, an action research at a NGO, started in August 2014. The interim manager is interested in if a presumably organizational trauma causing the problems in his organization. We will describe the steps to diagnose the NGO if it has a traumatized system, what the organizational characteristics and strengths are that mitigate or exacerbate the effects of the presumably trauma and which interventions, in consultation with the organization members, can help the NGO to enhance organizational health.

Keywords. organizational trauma; organizational diagnoses, organizational healing, relationship dynamics, organization culture
Resilience in the event of long-term absenteeism

*paper included in Conference Proceedings*

**Author:** Dr. Leni Beukema
Hanze University of Applied Sciences

**Abstract.** Using literature on long-term sick leave and sense making in relations between individual and organisation our research focussed on possibilities of increasing resilience of people in returning to work after a long period of sick leave in units of National Police in The Netherlands. Special interest was the subject of dealing with posttraumatic stress syndrome (PTSS), for which the police organisation has increased attention during the last couple of years. This attention concerns mainly operational sources of stress, drastic events as causes for PTSS. Research shows the importance of relating these sources to organisational stress factors, which are often more influential on the development of PTSS. Insight in these stress factors gives points of departure for dealing more adequately with this problem.

Through a narrative approach we’ve done nine case studies. For each of these cases we held in depth interviews with police officers, analysed the transcripts of these conversations and submitted the results to the respondents. This way we highlighted sense making through intersubjectivity (ic ground patterns in the interaction between individual and organisation). Clustering these patterns shed light to generic subjectivity in dealing with long-term sick leave, which we defined as organisational stress factors. Feedback on this analysis was asked from a focus group and directors of the program ‘professional resilience’ of National Police, who confirmed the analysis. Conclusions were drawn on the importance of scope of police officers on their reintegration, of reciprocity in relationship between these officers and their management, of more knowledge on PTSS en its sources and of dealing with diversity in the organisation.

**Keywords.** long-term sick leave, sense making, resilience, occupational health, PTSS, stress factors, reciprocity
Work Well-being of Self-employed

*paper included in Conference Proceedings*

Authors: A. Jortikka¹ and H. Palmgren²
¹Centre for Economic Development, Transport and the Environment
²Finnish Institute of Occupational Health

Email: anne.jortikka@ely-keskus.fi

Abstract. The study examined work well-being of self-employed operating in the Satakunta region in Finland. The aim was to gain new insights into entrepreneurship and how it can be supported. The study utilized the Work Well-being Model by Manka (2010) and explored its usefulness in gaining understanding about the work well-being of the self-employed. The study was based on semi-structured interviews of 9 self-employed persons and one former entrepreneur between 5.12.2014 and 12.12.2014. The themes of the interviews were based on the five dimensions of the Work Well-being Model: Organization, Work Community, Work, Leadership, and Individual. The interview material was analyzed using content analysis. The dimensions of the Work Well-being Model appeared to be useful in examining how the self-employed experienced their work well-being. Still, the model does not fully take into account the special characteristics of the self-employed and need to be further developed. As a rule, the self-employed of the study were satisfied with their work and roles. The significance of different kinds of networks was highlighted by all the interviewees within all the five dimensions of the model. Networks provided arenas for learning from each other and support to the individuals and their businesses. This finding suggests that networks may have even more valuable role than anticipated in supporting the work well-being of the self-employed and the success of their businesses. Networks could also be utilized by business advisers as a way to ensure support to new entrepreneurs.

Keywords. work well-being, self-employed, entrepreneurs, networks
WORKSHOP 3.4  Research Methods for investigating health and safety practice in micro and small enterprises

Chair: Monique Ramioul
ROOM: F1.20

Introduction to ESENER

Author: Mr William Cockburn, Head of the Prevention and Research Unit, EU-OSHA.

Abstract. EU-OSHA’s second European Survey of Enterprises on New and Emerging Risks (ESENER-2) was completed in 2014, interviewing almost 50,000 establishments across all activity sectors in 36 countries. The survey helps fill an important information gap in the world of occupational safety and health (OSH). Data have been available for many years on work-related accidents and ill-health through surveys directed at workers and through reporting systems. However, we know very little about the way in which health and safety risks are managed in practice; particularly those that are ‘new and emerging’, such as work-related stress, violence and harassment.

A better understanding of the way in which enterprises tackle all aspects of health and safety is particularly important as companies are under even more pressure to remain competitive and therefore have to use resources efficiently and in a targeted way. This may have an impact on developing prevention strategies as well as staffing levels. At the same time, work-related stress, violence and harassment present a new and increasing challenge for enterprises. Therefore, an understanding of workplaces’ needs for support and expertise, of the factors that encourage action and of those that hinder it, is essential for the design of effective interventions.

The findings of ESENER-2 are particularly relevant for the smallest business sizes as the survey has interviewed almost 34,000 micro and small enterprises (across 36 countries in all activity sectors) employing between five and 49 people: 13,000 micro and 21,000 small enterprises. This is why it is a great opportunity for the Agency to participate at the USE 2015 Conference and share and discuss with researchers the results of ESENER-2 in the three workshops that we are organising on (1) research methods for investigating health and safety in micro and small enterprises (2) the main ESENER-2 findings (3) possible topics for future ESENER related research.
Methodological challenges of interviewing micro and small firms on the topic of health and safety—experiences from ESENER-2

Author: Arnold Riedmann, TNS Infratest Sozialforschung

Abstract. As one of very few European-wide surveys, ESENER-2, the second establishment survey conducted on behalf of the European Agency for Safety and Health at Work included micro and small workplaces (from 5 employees onwards). Extending a multi-country CATI survey on the health and safety topic to these very small workplaces presented a number of methodological challenges which will be subject of this paper.

(1) Sampling and weighting

Though in many countries, the available sampling frames do cover micro and small enterprises, these small units tend to be under-represented. Moreover, statistical information on micro-enterprises is often not obtainable in the desired differentiation. The impact of these challenges on the survey data and possibilities to cope with them will be discussed.

(2) Non-response

Analyses of the data from the ESENER-2 gross sample reveal large differences in cooperation and response rates between establishments of different sizes. The micro and small workplaces turned out to be harder to reach and less willing to participate in the survey, though with some marked differences between countries. The applied stratified random sample design allowed to largely compensate for the lower cooperation rates of the small workplaces without having to compromise in terms of the sample structures. Nevertheless, the lower cooperation rates raise the concerns about a larger participation bias among the smaller workplaces, with establishments performing well on the subject being more likely to have participated in the survey.

(3) Adaptation of the questionnaire to micro and small enterprises

The questionnaire for ESENER was originally designed with a focus more on middle-sized and larger workplaces with their more formal approaches towards the management of health and safety. The often more informal practices of micro and small firms are much more difficult to capture. Though efforts were made to adapt the questionnaire to their situation, feedback from respondents and interviewers shows that respondents from micro and small workplaces sometimes felt that it was not always capturing their situation with full adequacy.

(4) Selection of respondents

Previous studies have shown that micro and small enterprises do often not have a person specialized in health and safety. Instead, either the general manager/owner takes care of the issue him- or herself or the health and safety duties are outsourced to an external supplier or nobody feels really responsible for the topic. For ESENER-2 with its respondent definition as “the person who knows best about health and safety at the establishment”, this presented a challenge: While the respondents in medium and large workplaces were often health and safety specialists with a lot of detailed knowledge about the subject, for respondents in micro and small establishments the topic was mostly just one of several duties they had. Multi-variate analyses carried out with the ESENER-2 data show in how far these differences in the type of respondents have an impact on the survey results.

The presentation discusses these methodological challenges and possible ways on how to take the specific situation in micro and small establishments even more into account in future survey research.
The OSH-situation in micro and small firms - methodological challenges in European and German surveys and research projects

*short paper included in online Conference Proceedings*

**Authors:** Lothar Lissner and Réka Zayzon, Kooperationsstelle Hamburg IFE

**Abstract.** The paper gives an overview of methodological challenges to European and German surveys and research projects investigating the OSH situation in micro and small firms. The challenges are illustrated by concrete examples and systematised according to the project phases of design, data gathering and analysis as well as to conceptual, attitudinal, motivational and pragmatic factors determining these processes. These challenges are connected with the operationalisation of the research questions (indicators and related questions); accessibility and sample bias; practical feasibility and logistic constraints; attitudes and motivation of respondents; communication (problems related to speech register and terminology between researcher/interviewer and respondent); diversity of work place reality (sectors, occupations, employment arrangements), diversity in terms of expertise of the actors, national infrastructure – which all affect the comparability and interpretation of the collected raw data.

The examples are drawn from the practical experience of the authors gained by the implementation of a number of European level and national level evaluation studies.

Project phases and related actions:

- **Project design:** decision on size, duration, purpose, ex-ante, ex-post target groups of results, etc.
- **Conceptual design:** identification of evaluation aspects and evaluation questions, answer options, target groups, context factors, type of interview / survey, recording of interviews, training of interviewers, terminology and speech register of the target groups.
- **Logistical overall scheduling of work:** personal and time, access to contact data, contact method (phone, email, letter), feedback and support for respondents, In European surveys: translation and linguistic issues.
- **Data collection:** contact, pretest and interviews.
- **Data analysis:** assessment of data reliability, statistical analysis of quantitative data, qualitative analysis, use of content analysis software , data interpretation, i.e. triangulation with desk review and other sources; possibly conclusions and recommendations.
WORKSHOP 3.5  Online tools: a good practice to support implementation of IOSH measures in SMEs

Chair: Marc Malenfer
ROOM: F2.14

Online tools: a good practice to support implementation of OSH measures in SME

Authors: Marc Malenfer\(^1\) and Patrick Laine\(^1\)
\(^1\)INRS

Email: marc.malenfer@inrs.fr | patrick.laine@inrs.fr

Abstract. In its new strategic framework 2014-2020 for occupational safety and health, the European Commission underlines that “SMEs have more difficulties in complying with the regulatory requirements in this area. In most cases, the scope and effectiveness of OSH management remains a particular challenge for micro and small enterprises. Smaller establishments still tend to show lower levels of compliance with national and EU rules, and report fewer OSH management measures as compared with large establishments.” Providing practical support to small and micro enterprises to help them to better comply with health and safety rules has been identified as one of the seven key strategic objectives by the European Commission in its new strategy.

The development of more and more online interactive and digital tools is an opportunity to face this challenge. Many occupational health and safety actors have already shown interest in the possibilities offered by these new technologies and have over the last years developed such e-tools. Those tools: - Help “empower”, foster the autonomy of micro and small companies when it comes to risk assessment or managing OSH in general. - Are easy to disseminate through Internet to a huge number of companies.

This workshop will aim at highlighting tools that enhance the capacity of micro and small enterprises to put in place effective and efficient risk prevention strategies. There are several already existing examples over the world. The solutions provided to increased autonomy of SMEs on OSH approach make sense in regards of the number of companies.

Taking into account the added value of those tools and the fact that their number will most probably increase in the forthcoming years, it will be very interesting to exchange on their use and benefits and to build on the experience of others.

Keywords. Online, interactive, practical and simple tools, compliance with occupational safety and health requirements, risk assessment
MAVImplant, an online tool for building a 3D mockup workplace for small enterprises

*paper included in Conference Proceedings*

Authors:
Ing. Pierre Canetto, Institut national de recherche et de sécurité (INRS), France
Jacques Marsot, Institut national de recherche et de sécurité (INRS), France

Email: pierre.canetto@inrs.fr | jacques.marsot@inrs.fr

Abstract. As part of its strategy to address micro and small and medium enterprises (SMEs), the INRS (National Research Institute for Safety and Health) has developed an online tool called “MAVImplant”, dedicated to designing mockups of workplaces. Reaching these companies relies on the idea of proposing a stand-alone tool that will be of appreciable use for small enterprises managers at a critical moment, when they must undertake the major task of investing in their future production tool.

Users can access this open Web application, on which they can build a 3D mockup of their future workplace. They are guided throughout the successive workplace design steps. At each step of the project, the software supplies information and assistance relating to occupational health and safety (OHS) and “good practices” of workplace environment design. Introducing OHS issues upstream in the project facilitates taking preventive actions at source.

To ensure that SMEs are addressed effectively, the tool is adapted in a variety of “trade applications” that implement the items of equipment and the actions and rules specific to each sector of activity. These elements have been defined by workgroups composed of representatives of the profession and prevention specialists.

The assistance provided to the user is intended to be simple and non-constraining. Practical examples and references are provided to facilitate the autonomous use of the tool.

Different mockup visualization tools based on virtual reality concepts allow the user to conceptualize the future work environment. The software is interactive: the user enters the information and inserts the 3D objects in the mockup, and these actions trigger the display of messages that help them to progress. This online tool allows the SME managers to communicate on their project with the different actors involved: the future users, the architect, and the experts concerned. Collaboration is aided by specific tools: the insertion of post-it comments in the mockup, the addition of comments on the objects, sharing of the mockup between users. Exchanges between the latter are aided by the edition of a report summarizing the project’s specifications. Prevention is taken into account by the organization and reservation of spaces, and the layout of flows and traffic, as well as attention given to the risks that can be dealt with through the design of the workplace.

MAVImplant was first implemented in two pilot sectors: baking and pastry-making, and automobile maintenance and repair. After analyzing feedback from these two sectors, adaptations for other sectors will be developed.

Keywords: online tool, 3D software, workplace design, SME, health and safety at work, small enterprise
**Stoffenmanager: one decade of development and implementation**

**Authors:** Albert Holander¹ and Henri Heussen¹

¹Cosanta

**Email:** albert.hollander@cosanta.nl | henri.heussen@cosanta.nl

**Abstract.** At USE2009 the results of a Dutch prevention programme on hazardous substances was presented. Within this programme a risk assessment tool for SMEs was developed, Stoffenmanager (www.stoffenmanager.nl). Stoffenmanager has been designed for SMEs and provides an answer to questions like: "where are my risks and how can I control these so that our employees stay healthy?" With the help of Stoffenmanager companies are able to identify the chemicals they are working with and prioritize dangerous substances. They can also estimate potential health risks when working with these chemicals.

A lot has changed since Stoffenmanager was been developed over ten years ago. Firstly, Stoffenmanager was validated. As a result, companies can use Stoffenmanager to perform exposure assessments in the context of the Chemical Agents Directive and REACH. Because of these developments Stoffenmanager has been acknowledged by the Dutch Labour Inspectorate and ECHA (European Chemicals Agency).

Secondly, the number of users has grown up to over twenty thousand as this moment. This growth was due to the fact that Stoffenmanager was translated into multiple languages (Dutch, English, Finnish and German). In order to structure this process a ‘Translation’ platform was built in order to manage the translations process and to keep all languages up to date.

Thirdly, the intensive use of Stoffenmanager led to new user requirements and further development of the tools. This is only possible with a sustainable business plan. Therefore the freemium model was introduced, meaning there is a free basic package suitable for SMEs just starting with Stoffenmanager or having a limited number of substances. Stoffenmanager Premium package has been developed besides the free basic package. The Premium package offers different features for customers who have many products and perform many calculations and exposure estimations. Additionally, the Premium package offers for Stoffenmanager the possibility to execute a sustainable business plan.

Fourthly, Stoffenmanager is as good as its intensity and the way it is being used. Therefore, a seven steps implementation ladder was developed and validated within 45 companies. Through training and meetings, on site visits by the companies' personal coach and an online platform with background information is was possible for most of the companies to move one or more steps up the ladder.

Finally, maintaining an instrument like Stoffenmanager is an ongoing process. Continuous changes in relevant regulations and scientific developments result in a monthly new release of Stoffenmanager, applying minor and major changes. This is the reason why Stoffenmanager has adapted the open innovation philosophy. Stoffenmanager needs the cooperation with various organizations.

**Keywords.** Hazardous substances, online tools, implementation, Stoffenmanager, occupational safety and health
Digital Delivery of Occupational Safety and Health Content: Making Research Easy to Use and Easy to Steal

*paper included in Conference Proceedings*

**Authors:** G. Burnett¹ and T.R. Cunningham²
¹National Institute for Occupational Safety and Health, United States of America
²National Institute for Occupational Safety and Health, United States of America

**Email:** gburnett@cdc.gov | tcunningham@cdc.gov

**Abstract.** Prolific as they are, smaller businesses have higher rates of injuries, illnesses, and fatalities. Because there are so many of these firms, it is difficult for occupational safety and health agencies to reach them all with the needed help. By involving intermediary organizations in their outreach activities, OSH agencies can provide resources to small enterprises. If the resources they provide are easy to use and easy for intermediary organizations to localize, the OSH interventions are more likely to be adopted by the small business owners who receive them. When products are available digitally, costs are lower, small businesses and intermediaries can more easily repurpose them, and peer groups can share them more broadly. Safety products that are easy to use and easy to steal are more likely to see wide adoption.

**Keywords.** research to practice, occupational safety and health
Contributing Factors for Overwork Accidents Prevention in Small Enterprises of Truck, Bus and Taxi Businesses

Authors: Sadao Horino¹, Yutaka Kobayashi², Tomonobu Sugisaki³ and Yoshiaki Kono⁴

Affiliations and email address:
1. Kanagawa University, Research Institute for Well-informed and Risk-free Transportation (KU-WIRF), horino@kanagawa-u.ac.jp
2. Director, Safety Policy Division, Road Transport Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT) of Japan, kobayashi-y26f@mlit.go.jp
3. Director for Accident Prevention, Safety Policy Division, Road Transport Bureau, MLIT of Japan, sugisaki-t2dg@mlit.go.jp
4. Chief, Safety Policy Division, Road Transport Bureau, MLIT of Japan, kohno-y2jc@mlit.go.jp

Abstract. The practical means of securing suitable safety management procedures within small transport enterprises in preventing driving accidents due to overwork are discussed based on investigations of safety management procedures being taken in these enterprises. The study was initiated following a typical fatal accident due to overwork of a tour-bus driver during long distance overnight driving. The bus had to make a round trip from Tokyo to Kanazawa (460km) and back. The return trip with 45 tourists going to the Tokyo Disneyland departed at 10:00 p.m. and the bus crashed in the early morning into a sound-insulating wall along the Kanetsu-Expressway. The bus body was cut by the wall into a skewered state causing seven fatal, 15 serious and 23 slightly injured casualties. The bus company was a small enterprise with 20 buses, and the government audit clarified twenty or more violations in compulsory administrative items. Reflecting the social concerns aroused by the tragic accident, the government Committee in which the authors participated examined the background factors of the overwork/drowsy driving and concluded that an inadequate shift system caused the accident.

It should be noted that recently, overwork/health-origin accidents tend to increase in Japan. The number of health-origin accidents reported under laws and ordinances increases rapidly from 51 in 2003 to 143 in 2012, mainly due to cardiac disorders and cerebrovascular diseases. The tragic accident disclosed the general lack of proper safety management and thus led to reorientation of administrative support measures for these small enterprises.

On-site investigations were conducted in twelve small enterprises, four each of truck, bus and taxi businesses. This included interviews with the CEOs, and focused on a) road transport safety management, b) overwork prevention and health care including roll calling, flexible operations, introduction of new technologies and c) any need for government support. We could confirm varied unique safety management know-how for preventing overwork/health-origin accidents that required multifactorial assessment and control measures. A strong need was common for a safety management structure comprising four components of drivers, their families, operation managers and travel agencies. Practical support measures identified were (1) awareness raising and the ownership of drivers for safety in their work duties and in dealing with imminent risks, (2) support for their families taking part in terms of health care for the drivers, (3) routine support for operation managers dealing with shift systems, resting
facilities and health checks, and (4) informed trip management of travel agencies. Establishing the mutual trust with the customers for adjusting operation time was found essential.

The study results confirmed the importance of effective support for small transport enterprises for securing overwork/health-origin accident prevention measures. The results also confirmed the need to apply risk management procedures corresponding to the Plan-Do-Check-Act cycle aimed at preventive safety management with the active cooperation of drivers and managers. The PDCA cycle should address the four components of safety management revealed. Stepwise spiral-up progress in extending practical support measures to small businesses is vital in overwork accident prevention.

Keywords: overwork accident, safety management, transport business, small enterprises, shift systems, health care

Top author’s information (short biography of Sadao Horino)

1. Born at Osaka in 1941 and live at Yokohama, Japan

2. Educational background
   - 1964: Bachelor of Engineering (Industrial Engineering), University of Osaka Prefecture, Osaka.
   - 1966: Master of Engineering (Industrial Engineering, Ergonomics), Graduate School, Waseda University, Tokyo.
   - 1969-71: Research Fellow of Ergonomics, Department of Industrial Engineering, ditto.

3. Occupations
   - 1971: Assistant Professor of Kanagawa University, Department of Industrial Engineering, Faculty of Engineering.
   - 1973-2011: Associate Professor, ditto.
   - 1976-2012: Lecturer, Keiou University, Graduate school of Business Administration
   - 1984-1997: Lecturer, Chiba University, Department of Industrial Design, Faculty of Engineering.
   - 1984-1995: Lecturer, Ochanomizu Women University, Faculty of Home Economics.
   - 1986-2005: Lecturer, University of Tokyo, School of Medical Science, Department of Occupational Health.
   - 1995-2013: Lecturer, Kawasaki Municipal College of Nurse
   - 2008-present: Director, Research Institute for Well-Informed and Risk Free Transportation, Kanagawa University
   - 2011-2013, President of Drive Recorder Consortium, Japan
   - 2011-present, Guest Professor on Ergonomics, Kanagawa University
4. Scientific Social Biography (main activities)

- 1961: member of Japan Industrial Management Association (JIMA).
- 1964: member of Japan Ergonomics Society (JES)
- 1968-1978: editor of Journal of JIMA.
- 1970: member of Human Ergology Society (HES), Japan.
- 1970-present: Council Member of HES
- 1976-present: member of Society of Physiological Anthropology
- 1983-2007: Executive Council Member of JES.
- 1985-1999: Referee of Good Design Mark, Japan Industrial Design Promotion Association (affiliated to METI, Japan)
- 1988-present: Expert of ISO/TC159/SC4 (Human-Systems Interaction)/WG8 (Ergonomic Design of Control Centre)
- 1990-2013: Council Member of International Ergonomics Association (IEA).
- 1990-present: Chair The Safety Committee of Construction/Earth Moving Machinery, The Ministry of Land Infrastructure and Transport and Tourism (MLIT), Japan
- 1992-1994: Executive Council Member of IEA,
- 1999-2012: Chair, the Committee for Factor Analysis of Road Traffic Accidents Among Professional Drivers, MLIT(Ministry of Land, Infrastructure, Transport and Tourism), Japan
- 1999-2011: Chair, the Committee for Factor Analysis of Road Traffic Accidents Among General Drivers, MLIT, Japan
- 2001-2008: Part-time Judge on Human Factors at the High Marine Court, Japan
The “Italian” OiRA Project: the development of the tool according to the Occupational Health and Safety Italian Legislation

*paper included in Conference Proceedings*

Authors: E.Rotoli1 and G.Braceletti2

1Inail National Institute for Insurance against Accidents at Work
2Inail National Institute for Insurance against Accidents at Work

Abstract. The effectiveness of OSH management remains a challenge for micro and SMEs. They still show lower levels of compliance with rules, therefore, there is a need to put in place simpler and more efficient solutions and to provide micro and small enterprises with tailored guidance and support to facilitate risk assessment. One of the most important aim of the “Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a EU Strategic Framework on Health and Safety at Work 2014-2020” (June 6, 2014) is to implement actions at EU and at national level, including appropriate adaptation of tools, such as OiRA, in order to support micro and small enterprises. Italy takes part of the OiRA project through the Memorandum of Understanding signed in August 30, 2013, by the Ministry of Labour and Social Affairs and the European Agency for safety and health at work (EU OSHA). In order to develop the Italian OiRA tools, according to the OiRA project guide, the Ministry of Labour has involved different stakeholders representing Public Institutions (such as the Ministry of Health, INAIL - Italian Workers’ Compensation Authority and the Regions), trade Unions and sectoral experts. Most of these representatives are also members of the Italian Permanent Consultative Commission for the Prevention of Accidents at work and Occupational Health, a tripartite organism, chaired by the Ministry of Labour, established by the Article 6 of the Italian Legislation on Occupational Safety and Health (Legislative Decree 81/2008 and subsequent modifications and supplements). Since December 30, 2013, the OiRA Group has been chaired by the Central Director for Prevention of INAIL, Ester Rotoli; the main goal is to adapt the software to the Italian legislation on Occupational Health and Safety in order to allow the micro, small and medium enterprises to easily carry out the correct risk assessment and to facilitate them in preparing the mandatory Risk Assessment Document. The presentation shows the tools with practical examples and explanations, following all the mandatory requirements of the Italian Legislation, implemented through the activity of specific working groups, established within the OiRA project.
Evaluation for adequate driving and resting time of the commercial bus drivers

*paper included in Conference Proceedings*

Authors: T. W. Jang¹, H. R. Kim¹, J. S. Byun¹, P. Sung-Hye¹
¹Department of Occupational and Environmental Medicine, College of Medicine, The Catholic University of Korea

Email: T.W Jang: om1024@hanmail.net

Abstract. The present study aimed to provide a basis for policy of commercial bus drivers’ adequate working time. For this purpose, we investigated the working conditions of bus drivers and evaluated adequate driving and resting time in a day. The present study was composed of literature review, interview for work conditions of bus drivers, questionnaire survey, and measurement of biomarkers for bus drivers. We identified work conditions such as work schedule, type of bus driving and bus, and others through interview for bus drivers. Based on the information from this interview, we determined the number of study subjects for questionnaire survey. In the future, we will analyse the information of literature review, interview, and measured biomarkers including salivary cortisol, blood pressure, heart rate, physical activity, energy expenditure, fatigue and risk index, and maximum acceptable work time. We hope to show you all result from the present study, and the result could be helpful to establish a policy for the safety of the public, as well as health promotion or bus drivers.

Keywords: Bus, Driver, Driving time, Working hours
**WORKSHOP 4.2  ** **Special Session: Roundtable Sustainability & Finance I**

*Chairs: Margreet Boersma and Frank Jan de Graaf*

**ROOM: E1.44**

**Roundtable discussion - The role of finance & accounting in healthy businesses and a sustainable society (Sustainability & Finance I and II)**

**Content Description**

In this set of roundtable sessions, participants will discuss current developments in finance and how finance and accounting can contribute to a healthy workplace and a more sustainable society. The aim of the five sessions is to learn from each other and to explore our mutual intent and competencies for further cooperation.

The sessions will relate personal motivations and best practices to new emerging practices within companies and other organizations. Finance and accounting is not seen as a unique specialism, but as a critical stewardship function within an organization. The case clinic methodology of Otto Scharmer will have a critical role in this program. Also, participants in the session will reflect on these kind of integrative methodologies and the implications for research and practice.

The roundtable sessions are building up towards a conclusion, therefore we ask participants to join all five sessions (within 4.2 and 5.2). We ask participants to share ideas or experiences with research, that unites organisations, education and research.

- First two sessions (4.2): Thursday afternoon, 22th of October - Sustainability & Finance I;
- Last three sessions (5.2): Thursday afternoon, 22th of October - Sustainability & Finance II.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Action</th>
<th>Question</th>
<th>Explanation</th>
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<tr>
<td>Meeting</td>
<td>Acquaintance</td>
<td>Who am I and why do I feel connected</td>
<td>Every participant is telling his/her story</td>
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| Sharing | Best practices about the why question, relating practice, education and research | How do I shape my own ‘why’?                     | · Every participant shares a case in which he is engaged, and how it is related to the ‘golden triangle’ organisations, research and education
|         |                                    |                                                  | · Guest speaker: someone from the program Action learning & action research program ‘touching the community soul’ |
| Presencing | Vision development session by the clinic method (Theory U) | What do we want to be, what is your dream?       | Interactive dialogue
|         |                                    |                                                  | Guest speaker: Adriaan Bekman (to be confirmed) about his work at Triodos                      |
| Prototyping | Opportunities for cooperation, first steps | What can we do together?                        | To further strengthen our change potential                                                       |
| Reflection | Discuss process and content         | What have we learned?                            |                                                                                                 |
WORKSHOP 4.3  OSH: firm's culture and employment relations  
*Chair: Barry Foster*

ROOM: F2.17


*paper included in Conference Proceedings*

**Authors:** B.Foster\(^1\), D.Farr\(^2\) and I.Laird\(^3\)  
\(^1\) School of Management, Massey University, New Zealand  
\(^2\) Ernslaw One Ltd, New Zealand  
\(^3\) School of Public Health, Massey University, New Zealand

**Email:** a.b.foster@massey.ac.nz | deirdre.farr@ernslaw.co.nz | I.S.Laird@massey.ac.nz

**Abstract.** The nature and function of Employment Relations (ER) practices have been extensively researched in larger enterprises and a growing literature in small and medium enterprises (SMEs). The management of Occupational Health and Safety (OSH) has also been extensively researched in SMEs. However, there is little research examining the inter-relationships between ER and OHS systems and practices in SMEs. A quantitative and qualitative methodological study has been designed to determine the nature and extent of the inter-relationships between the ER and OHS practices and systems in SME’s. This will be done by further development and testing of a model adapted from the ILO framework of Socially Decent Work (Bonnet, Figueiredo & Standing, 2003; Coetzee, 2011). Based on the statistical analysis of two sub-objectives, the results of this survey will identify the level of commitment to ER and OHS practices in SME’s. In other words, the SMEs with developed ER systems and practices should have developed OHS systems and practices. These inter-relationships will be tested specifically by enterprise size and industry sector. It is important from an ER perspective that ‘positive employment relations’ systems and practices are developed in SMEs to contribute to overcoming the low productivity record in this country. This is also important from an OHS intervention design perspective, where the existence (or not) of OHS systems and practices can have a positive (or negative) influence on health and safety performance outcomes for SME’s in particular.

**Keywords.** legislation, small to medium enterprises, policy, practice, theory
Defining a healthy and safe work environment in SEs in New Zealand: A study of the ‘good employer’.

*paper included in Conference Proceedings*

**Authors:** D.T. Farr¹ and B. Foster²
¹ Ernslaw One Ltd, New Zealand
² Massey University, New Zealand

**Email:** a.b.foster@massey.ac.nz | deirdre.farr@ernslaw.co.nz

**Abstract.** This paper examines the concept of a ‘good employer’ regarding employment relations (ER) and occupational health and safety (OHS) practices in small enterprises (SEs) in New Zealand. The assumption that SE employers’ are paternalist and favour an individualistic approach to managing the employment relationship and OHS risk, and consequently that SE terms and conditions of work are generally inferior to large enterprises has not been tested in SEs in New Zealand. A qualitative approach was adopted involving conducting semi-structured interviews with 12 small enterprise employers. How these ‘good employer’ perceptions, attitudes and beliefs were implemented in practice was explored through the five dimensions of a ‘good employer’ adapted from the ILO dimensions of socially decent work at the workplace level. The overall results on a continuum showed some were only compliance driven, some employers had characteristics such as training and development along with OSH risk management, and the few exceptional employers could be described as having most of the characteristics of a ‘good employer’.

**Keywords.** good employer, employee voice, decent work, occupational health and safety, legislation, qualitative
Healthy and safe working environment, organisational learning at SMEs - as a part of company safety culture

Authors: Ass.Professor Karin Reinhold¹, Anu Virovere¹ and Marina Järvis¹
¹Tallinn University of Technology

Email: karin.reinhold@ttu.ee | marina.jarvis@ttu.ee

Abstract. Introduction: Organizational learning is a part of process during the organizations create, disseminate and share their knowledge. For learning to occur, several conditions must be satisfied: there is a need for learning environment which consists of social relationships networks in which people interact; organizational structure which provides possibilities for sustained interaction, conversations, socialization, teamwork and cooperation between its members and, thus allows collective learning.

Objective: The study proposes a model for a positive safety culture with focuses on organizational learning, which enables to exchange tacit and explicit safety knowledge. This article concerns organizational safety culture and the structure or architecture of employees’ and employers’ attitudes and perceptions to safety as part of that culture, as well as the ability to learn, which also should mean changes in worker’s behaviour in order to enhance safety culture in Estonian small and medium sized enterprises (SMEs).

Methods: The study assesses senior managers and employees’ perceptions of the current safety culture, information needs and learning possibilities in Estonian SMEs from different branches of industry, using two different questionnaires on a sample of 463 senior managers and 1757 employees. A qualitative approach includes eight case studies, semi-structured interviews with senior managers and focus group interviews with employees and on-site observations. Supplementary methods are analysis of numerous health and safety documents and safety audits.

Results: The data reveal key issues in safety culture and learning possibilities in industrial SME. A statistical analysis of safety culture questionnaires shows many organizations with an outstanding safety culture and positive safety perceptions and attitudes. However, qualitative data indicate some important safety flaws and drawing attention to contextual variables in the development of safety management systems and improving the learning possibilities.

Conclusions: The study evaluates safety programmes in SMEs in order to highlight the social and cultural character of learning in organizations, and thus attribute the role of safety culture in safety knowledge exchange. The paper presents an innovative conceptual model for the improvement of safety culture. The authors emphasise the importance of implementing organizational structures, which allow for managers and employees to interact and cooperate, to learn from safety practice and experience. The essential aspects are the established safety management system have to be a fully integrated part of general management system in the organization and safety knowledge, like most culturally-based things, must be recognized, acknowledged and be managed.

Keywords. occupational health and safety, organizational learning, safety culture, safety management systems
WORKSHOP 4.4  Results from the Second European Survey of Enterprises on New and Emerging Risks (ESENER-2)

Chair: Peter Hasle
ROOM: F1.20


*paper included in online Conference Proceedings*

Authors: Xabier Irastorza, Malgorzata Milczarek and William Cockburn

Name: Xabier Irastorza
Position: Project Manager, Prevention and Research Unit
Organisation: European Agency for Safety and Health at Work, EU-OSHA
Email: irastorza@osha.europa.eu

Abstract
The European Agency for Safety and Health at Work (EU-OSHA) completed its second European Survey of Enterprises on New and Emerging Risks (ESENER-2) in 2014, interviewing almost 50,000 establishments across all activity sectors in 36 countries. The survey helps fill an important information gap in the world of occupational safety and health (OSH), particularly for the smallest business sizes as ESENER-2 covers establishments employing at least five people. It explores in detail four occupational safety and health (OSH) areas:

1. The general approach in the establishment to managing OSH.
2. How the ‘emerging’ area of psychosocial risks is addressed.
3. The main drivers and barriers to the management of OSH.
4. How worker participation in OSH management is implemented in practice.

Key words.
Occupational safety and health management, risk assessment, drivers and barriers, international enterprise survey, micro and small enterprises.
Managing psychosocial risks in small enterprises – ESENER-2 findings

Authors: Malgorzata Milczarek, Xabier Irastorza, William Cockburn, European Agency for Safety and Health at Work, Bilbao, Spain.
Email: milczarek@osha.europa.eu

Abstract. Psychosocial risks and work-related stress are among the most challenging issues of occupational safety and health. The latest Barometer survey by the European Commission (2014) revealed that 53% workers in the European Union believe that stress is the main health and safety risk that they face in their workplace. Additionally, 27% of workers reported experiencing during last 12 months ‘stress, depression, anxiety’ caused or worsened by work. Although the respondents working in smaller companies were less likely to mention exposure to stress compared to those working in larger companies, when it comes to the reported work-related mental health problems, these differences diminished. ESENER-2 explored the perception and management of psychosocial risks in small enterprises, identifying specific challenges they face when dealing with these risks.

ESENER-2 was carried out in 2014 in 36 countries, covering establishments with five or more employees. Data were collected through computer assisted telephone interviews with a person ‘who knows best about health and safety in the establishment’.

The results show that, in general, psychosocial risk factors are perceived as more challenging than other OSH risks in enterprises of all sizes. The reported level of exposure to particular risks appeared higher in larger companies. The most commonly identified problem, ‘having to deal with difficult customers, patients, pupils etc.’ was reported by over 50% of small enterprises (5-49) and by over 60% of the larger enterprises (50-250+). ‘Time pressure’ was recognised in over 30% of small and 50-60% of larger enterprises. In terms of measures taken to deal with psychosocial risks, their number decreases along with the enterprise size. Up to 35% of small enterprises reported having an action plan to prevent work-related stress, as compared to 38% of medium (50-249) and 50% of the largest enterprises (250+). Having a procedure in place to deal with possible cases of bullying or harassment was reported by over 40% of small, 55% of medium and 70% of the largest enterprises. Additionally, small enterprisers more often reported ‘a lack of information on how to include psychosocial risks in risk assessments’ (indicated by over 40% of small and around 30% of larger enterprises). Nevertheless, possible obstacles to deal with psychosocial risks, such as for example ‘reluctance to talk openly about these issues’ and ‘a lack of awareness among staff’, were identified as important more often by larger enterprises.

ESENER-2 revealed differences among small and large enterprises in terms of reported exposure to psychosocial risks and measures taken to deal with them. The findings may indicate that the exposure to psychosocial risks in smaller enterprises is lower, but also, that there is a lack of awareness as those enterprises more often report ‘a lack of information on how to assess psychosocial risks’. Independently on the prevalence level, the results suggest that the affected workers may be less protected as small enterprises implement fewer measures to deal with psychosocial risks. Further analysis of the findings will contribute to better understanding of the challenges, identifying needs for support small enterprises should be provided with.

Keywords: psychosocial risks, ESENER, work-related stress, harassment, violence
Studying worker representation and involvement in health and safety in micro and small firms —what we know and some methodological challenges for finding out more

Author: David Walters, Cardiff University

Abstract. Worker representation and involvement in health and safety occurs on both a formal and informal basis. In the case of the former, within the EU, at least as far as representation is concerned, while it might take a variety of institutional forms, it is generally provided for by regulation.

Overall, research into the occurrence, operation and effectiveness of worker representation on health and safety finds it to contribute to positive health and safety outcomes. The first part of this paper briefly summarises this knowledge, covering a range of previous studies and including what can be derived on this subject from ESENER 1. Most findings are from studies of representation in larger organisations and less is known concerning its role in micro and small firms, although since occurrence is inversely proportional to establishment size, its presence in micro and small firms is limited. Also and partly for this reason, a number of initiatives (some of which are regulatory), aimed at giving workers in micro and small firms greater access to representation on health safety result in interventions that are different in character to those that apply to these matters in larger workplaces and therefore are not amenable to examination with the same techniques that can be applied in larger establishments. The following account considers some of these initiatives both in terms of what we know of them and how this has been learned and extends this to ask what insights this knowledge might bring to analyzing worker representation in the micro and small firms among the respondents to ESENER 2.

Turning to informal representation and involvement – which has become more common generally in recent decades, but probably always has been so in micro and small firms, what we know is far more limited. While there are many claims made for good practices in relation to informal worker involvement in both large and small firms, robust critical studies are rare. The paper reviews and evaluates what is known about the informal representation and involvement of workers on health and safety matters in small firms and outlines some of the challenges confronting research in this area, ending with some suggestions concerning future work, including that which might be undertaken in relation to ESENER 2.
WORKSHOP 4.5  Quantified self tools in the workplace

Chair: Hilbrand Oldenhuis
ROOM: F2.14

SPRINT@Work: How do we keep employees fit and healthy?

Author: Prof. dr. Hans Wortmann(1), Bart Verkerke, Sandra Brouwer and Monicque
(1) Faculty of Economics and Business, Operations. University of Groningen

Abstract. Content description: The demographic trend of the last decades has produced a relative decrease of the number of young people and a relative increase of the number of older employees. This has significant implication for the make-up of the future workforce, meaning that older citizens will be increasingly involved in the workforce. We are faced with an important challenge: to keep an ageing population healthy and deployable in the long term. However, due to their advancing years they may experience challenges in many ways, leading to a decline of workability that is quantified in the number of days of sick leave and the number of employees that become incapacitated. The challenges are mostly related to physical and cognitive decline. As a consequence, employees experience a higher than acceptable workload, and an increased risk for accidents, sick leave or drop-out.

SPRINT@Work aims to contribute to this ambition by developing, demonstrating and implementing a toolbox with sensor and intervention systems for employees that will evaluate and restore the balance between physical and cognitive work capacity and work load. To realise this, SPRINT is bringing together the available knowledge in the field of sustainable employability in the northern Netherlands. A number of knowledge institutions (University Medical Center Groningen, University of Groningen, Hanze University of Applied Sciences Groningen, Noordelijke Hogeschool Leeuwarden) are being combined with a cluster of companies in the fields of biomedical, care and fitness technology, multimedia applications, gaming, sensor technology and monitoring/telemonitoring. This combination will open up a whole new world of possibilities to develop innovative technologies, and above all to apply these technologies in order to monitor and maintain employee employability and to realize suitable work environments for older employees. To this end, employers in the northern Netherlands are collaborating within SPRINT@Work to test innovative products and technologies in actual practice and to adapt them to specific circumstances where necessary.

Project content. SPRINT@Work aims to contribute to the realization of a sustainably deployable working population in the northern Netherlands. This ambition has been translated into the following project packages:

- Development of monitoring products: innovative products in the fields of sensor technology and monitoring/telemonitoring that can make cognitive and physical performance objectively measurable, and that contribute to the employee’s awareness of his/her own behaviour and employability.
- Development of intervention products: new interventions to maintain employees’ physical and cognitive functioning and support them in developing compensatory mechanisms to reduce and even prevent imbalance between workload and work capacity due to ageing.
- Development of an ICT-platform to transport, integrate and analyse all sensor signals and derive practical parameters that can be used for direct feedback to the employee.
- Testing monitoring and intervention products in controlled as well as practical situations, and to set up the necessary telemonitoring systems to this end. Users will be an important factor when testing products in practical situations.
- Supporting the valorization of products and services.

Keywords. Employability, SMEs, Need assessment, Monitoring products, Intervention products, Valorization
Increasing employees’ level of sustainable employability via self-tracking devices

Authors: H. Oldenhuis¹, L. Polstra¹, H. Velthuijsen² and M. de Groot³

¹ Centre of Applied Labour Market Research, Hanze University of Applied Sciences, Zernikeplein 23, 9747 AS Groningen, The Netherlands
² Centre of Applied Research and Innovation Entrepreneurship, Hanze University of Applied Sciences, Zernikeplein 7, 9747 AS Groningen, The Netherlands
³ Quantified Self Institute, Hanze University of Applied Sciences, Zernikeplein 17, 9747 AS Groningen, The Netherlands

Email: h.k.e.oldenhuis@pl.hanze.nl

Abstract. Perceived health is an important determinant of sustainable employability. Therefore, increasing levels of sustainable employability by focusing on employees’ health is fruitful. The use of self-tracking devices – devices that provide the user with reliable and continuous feedback on one or more health domains – can be a useful tool in order to do so. Self-determination theory and goal-setting theory can be used to corroborate this expectation. In our study we tested this by providing 12 employees of a small firm with self-tracking devices used to measure physical activity (9), sleep patterns (1) or level of stress (2). During three months they used the devices and were supervised by a coach. Before, during and after the use of the self-tracking devices several types of data were gathered: participants filled in a questionnaire measuring quality of life (SF-12) before and after, interviews with the participants were conducted before and after, participants filled in logbooks during the three months and the devices generated data. The results are as follows: The participants showed higher levels of functional status, wellbeing, physical and mental health after the project, participants were moderately to highly satisfied about the self-tracking devices and they indicated higher levels of feelings of competence regarding healthy behaviour, and the participants could sum up several examples of changed behaviour (e.g. more physical activity, improved sleeping habits). However, in general, perceived level of sustainable employability was not increased, probably due to the relative low average age of the participants (47 years). The added value of supervision by a coach was generally corroborated. The input of the coach was regarded valuable in setting proper goals, in relating the user’s specific goals to more abstract, ‘higher order’ goals and in providing social support when necessary. Together these results led to the conclusion that the use of self-tracking devices combined with supervision by a coach is a useful tool to promote several determinants of healthy behaviour and healthy behaviour itself. In the long run this should lead to increased levels of sustainable employability as well. Furthermore, the theoretical perspectives provided by self-determination theory and goal-setting theory proved to be valuable in setting up this study and evaluating its results.

Keywords. sustainable employability, sensor technology, self-tracking devices, healthy behaviour
Three Dutch tools for online risk assessment of physical workload

*paper included in Conference Proceedings*

Authors: M. Douwes¹ and H. de Kraker¹
¹TNO, Leiden, The Netherlands

Abstract. In 2009 the Dutch Ministry of Social affairs and employment started a research program to accommodate Dutch companies in their obligation to protect employees from health and safety risks. As part of this program TNO developed three tools for the online assessment of work related risks of musculoskeletal disorders: the checklist for physical load, the Hand Arm Risk assessment Method (HARM) and the Working Posture Risk Assessment tool (WRAP). This paper describes the three tools and their development process.
**SESSIONS 5.1 - 5.5**

**WORKSHOP 5.1  OSH: sector level studies 3**  
*Chair: Supriya Lahiri*  
*ROOM: F1.19*

**Is There An Economic Case For Training Intervention In The Manual Material Handling Sector Of Developing Countries?**

**Authors:** Professor Supriya Lahiri, Tommaso Tempesti and Somnath Gangopadhyay  
University of Massachusetts Lowell

**Email:** supriya_lahiri@uml.edu

**Abstract.** Goal: The porters in the Central-Wholesale-Market of Vegetables in Calcutta, India, routinely and repeatedly balance and carry loads on their heads that weigh more than 100-120 kg without mechanical assistance, resulting in high levels of Musculoskeletal Disease (MSDs), Lower Back Pain (LBP), and morbidity. Our goal is to use an interdisciplinary economic evaluation approach to estimate Cost-Effectiveness Ratios (CER’s) and the net-cost of interventions of a training intervention to reduce morbidity and evaluate if market factors can drive improvements in employee health and productivity.

**Methods:** This is a pioneering economic evaluation study of ergonomic interventions for manual material handling for small scale enterprises in the informal sector of the developing world. It is based on a quasi-experimental study design with pre- and post-intervention (2011-2013, n=100) surveys. Health outcomes are computed as the difference in the pre- minus post-intervention survey results with respect to the SF-12 Physical Composite Scores (PCS), Mental Composite Scores (MCS) and the reduction in pain scale (PS). Multivariate analysis is performed to understand job characteristics, behavior of participants and occupational health status in the informal sector. The direct intervention costs of the training program are divided by the incremental health outcomes to obtain CER’s. The net cost of the intervention is computed as the difference between total costs of training intervention minus the benefits as avoided cost estimates of absenteeism.

**Results:** There is a statistically significant change in the average values of health outcomes PCS (2.5), MCS (3.2) and PSD (-1.0) between the self-reported pre and post intervention survey data. The CER’s are $6.97, $5.41 and $17.91 respectively. The kernel density function of effectiveness of the training program for PCS and MCS are more peaked and shifts to the right and that of PSD gets less peaked and moves leftward implying favorable health outcomes. For an expected benefit of a one point improvement in PCS per porter, the employer needs to spend an additional $6.97, for MCS $5.41 and that of PCS $17.91 per porter every six months. A one-time cost on training intervention can fetch all of the above benefits. The multivariate model showed that program adherence significantly affects PCS, MCS and PSD in the desired direction. The net cost of the intervention is the difference between the direct total costs of training intervention $1737.00 minus the benefits of the avoided cost estimates of absenteeism $7716.00. The net cost estimate for the training intervention over a six month period is $5979.00 (net gain). The reduction in absenteeism results in increased earnings for the porters and represents productivity gains for the society as a whole.

**Conclusion:** Favorable health outcomes, reasonable CER’s and negative net-costs make a strong case for the implementation of ergonomic training intervention to reduce morbidity in manual material handling jobs for small scale enterprises. Additionally, program adherence can significantly contribute to the success of these interventions. Engineering controls (carts, dollies and forklifts) probably would be more effective but the infrastructural bottlenecks are a formidable hindrance.

**Keywords.** ergonomic intervention, training, economic evaluation, cost-effectiveness, informal sector
Start Clear! Healthy hands and beauty

*paper included in Conference Proceedings*

Authors: A. Antes¹ and R. Hosemann¹
¹AUVA (Austrian Accident Insurance), 1200 Vienna

E-mail: astrid.antes@auva.at

Abstract. Hairdresser students often have problems with their skin from the beginning of their occupational life. No other profession starts so early with skin problems, no other profession is so often affected with skin problems during active professional life. This is the reason why the AUVA started this project with emphasis on vocational schools influencing the SMEs by knowledge and attitude. We take a three step action (schools/apprentices/barber shops). This project will be running another year so we can only present preliminary results or trends. University of Vienna, Department of Psychology accompanies the project and develops a tool in a modular assembly system. Elements of this system can also be used in later projects.

Keywords. hairdresser, early onset of dermatitis, preventive measures
The fishing industry in transformation – what are the implications for health and safety?

Authors: Sisse Grøn, Jeremy Hayman and Juan Rocha (Team WorkingLife)

E-mail: sig@teamarbejdsliv.dk

Abstract. In Denmark and New Zealand the fishing industry has traditionally consisted of small enterprises or self-employed fishing operators, but the occupational structure of the industry is changing. Indeed, the introduction of quota management systems in Chile was followed by an increased concentration of the fishing industry. There is evidence that the fishing industry has undergone a transformation in the majority of countries that have introduced quota management systems. Consequently, the purpose of this research is to examine the relationship between the introduction of quota management systems and health and safety in the fishing industry in Chile, Denmark and New Zealand.

Fisheries resources have changed from being a common resource to private property and the structure of fishing operations are changing accordingly. Furthermore, fishing is a notoriously dangerous occupation and many of the risks are related to the nature of the job itself. However, there is antidotal evidence that some of the risks may be related to the choice of fisheries and these are dependent on the quota management system of a particular country.

This study is particularly interested in the impact of different quota management systems from three countries on health and safety. Chile has a lower number of accidents reported than 5 years ago, but fishing is still the most dangerous occupation. Indeed, Denmark has seen a decline in reported accident rates within the fishing industry during the last decade. New Zealand's reported accident rates and fatalities have generally remained static over recent years, although fishing continues to be one of the most dangerous occupations.

New Zealand, along with Australia was one of the first countries to implement individually transferable quotas, while in Denmark the process went through various stages before the vessel quota system was implemented in 2007. The aim of this paper is to investigate the relationship between quota management systems and the health and safety of fishing operations based on qualitative data from three countries. Our data stems from ethnographic fieldwork from fishing industries in New Zealand, Denmark and Chile. The study data is predominantly gathered from interviews with key fisheries personnel and fishing operators. In addition, observations from the safety and psychosocial work environment literature are examined.

The paper argues that in the study countries there are now fewer self-employed operators and fewer vessel owners than before the change in quota management systems. In addition, those who remain in the industry are generally more in favor of doing business on market conditions, which provides different attitudes towards business management and safety obligations. Also, those remaining have more flexibility and more power to decide when and what they catch, which is crucial for fatigue and stress prevention, but on the other hand the fishing operators report new types of psychosocial strains.

Consequently, the findings of this study have implications for fishing industry stakeholders and small business enterprises in the three countries investigated. The study findings may also be generalisable to other fishing industries where quota management systems have been introduced.

Keywords. Safety culture, quota management systems, fishing industry and ethnography.
WORKSHOP 5.2  Special Session: Roundtable Sustainability & Finance II

Chairs: Margreet Boersma and Frank Jan de Graaf

ROOM: E1.44

Roundtable discussion - The role of finance & accounting in healthy businesses and a sustainable society (Sustainability & Finance I and II)

Content Description

In this set of roundtable sessions, participants will discuss current developments in finance and how finance and accounting can contribute to a healthy workplace and a more sustainable society. The aim of the five sessions is to learn from each other and to explore our mutual intent and competencies for further cooperation.

The sessions will relate personal motivations and best practices to new emerging practices within companies and other organizations. Finance and accounting is not seen as a unique specialism, but as a critical stewardship function within an organization. The case clinic methodology of Otto Scharmer will have a critical role in this program. Also, participants in the session will reflect on these kind of integrative methodologies and the implications for research and practice.

The roundtable sessions are building up towards a conclusion, therefore we ask participants to join all five sessions (within 4.2 and 5.2). We ask participants to share ideas or experiences with research, that unites organisations, education and research.

- First two sessions (4.2): Thursday afternoon, 22th of October - Sustainability & Finance I;
- Last three sessions (5.2): Thursday afternoon, 22th of October - Sustainability & Finance II.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Action</th>
<th>Question</th>
<th>Explanation</th>
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<tr>
<td>Meeting</td>
<td>Acquaintance</td>
<td>Who am I and why do I feel connected</td>
<td>Every participant is telling his/her story</td>
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<td>Sharing</td>
<td>Best practices about the why question, relating practice, education and research</td>
<td>How do I shape my own ‘why’?</td>
<td>· Every participant shares a case in which he is engaged, and how it is related to the ‘golden triangle’ organisations, research and education</td>
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<td>· Guest speaker: someone from the program Action learning &amp; action research program ‘touching the community soul’</td>
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<td>Presencing</td>
<td>Vision development session by the clinic method (Theory U)</td>
<td>What do we want to be, what is your dream?</td>
<td>Interactive dialogue</td>
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<td>Guest speaker: Adriaan Bekman (to be confirmed) about his work at Triodos</td>
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<tr>
<td>Prototyping</td>
<td>Opportunities for cooperation, first steps</td>
<td>What can we do together?</td>
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<td>Reflection</td>
<td>Discuss process and content</td>
<td>What have we learned?</td>
<td>To further strengthen our change potential</td>
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WORKSHOP 5.3  OSH: influencing firms
Chair: Garrett Burnett
ROOM: F2.17

Safety training to reduce wood dust: A work method

*paper included in Conference Proceedings*

Authors: Karl Gummesson and Alexis Rydell, School of Technology and Business Studies, Dalarna University, Sweden.

Email: kgu@du.se

Abstract. Air contaminants remain a problem in SMEs (Karlsson et al., 2006). Research has shown that short-term exposure to air contaminants can cause health risks, and short-term exposure has received low attention compared to long-term measured mean values of different air contaminants. Yet peak exposures often explain a large part of the mean exposure. The aim of this paper is to develop a work method that can be used to control wood dust and improve the work environment of SMEs. The work method was developed by earlier research in the field of safety training and occupational health, but also through interviews with regional safety representatives in wood industries. The work method illustrates several steps, such as risk and control identification of short term exposure, safety training (creation and implementation), and evaluation of safety training, collaboration in safety training, adaptation and implementation of safety training. The work method can be used by safety representatives to control wood dust primarily through safety training, but also to create conditions for further studies on risks and safety in SMEs.

Keywords. Air contaminants, control model, safety representatives, Peak exposure
An empowering network for micro- and small enterprises

*paper included in Conference Proceedings*

**Author:** J.Lerssi-Uskelin(1)
(1)Finnish Institute of Occupational Health

**Email:** jaana.lerssi-uskelin@ttl.fi

**Abstract.** There are about 280 000 companies in Finland, employing 1.4 million people. Most of companies (93.4%) are micro-enterprises (with less than 10 employees). Nearly 6% are small enterprises (with less than 50 employees), 1% are medium-sized (with less than 250 employees), and only about 0.2% are large companies. For over ten years in Finland, new jobs have been emerging in micro-enterprises and small- and medium-sized enterprises (SME). Healthy personnel and healthy entrepreneurs are the most important resource for the company’s operations and productivity. Unfortunately, health and well-being at work issues often receive less attention in small companies. Networking is also particularly important for small businesses. It is almost impossible to operate without networks today. The National Network on Well-being at Work at Finnish Workplaces (Tyhy Network) is a good model for connecting well-being at work and networking. The Tyhy Network started operations in 2012. Its aim is to create a platform for communication and co-operation for workplaces, well-being at work specialists and decision-makers; and to develop well-being at workplaces equally, openly, and through participation. One important objective of its operations is to help small enterprises in particular to network and obtain support for promoting well-being at work. Membership of the Tyhy Network is free of charge and open to anybody interested in well-being at work. It operates at the regional level. This helps connect people from the same area, who know the specialities of their region, and people from different workplaces; big, small, private, and municipal. It also helps connect those with different standpoints regarding well-being at work; those who see it from the perspectives of occupational health, occupational safety, human resources, pension companies, trade unions, entrepreneurs, employers, and employees. This promotes multiprofessional co-operation. Today, the Tyhy Network operates in twelve regions all around Finland. Currently, it has over 900 members; companies of various sizes (54% SMEs), with a variety of tasks: entrepreneurs, supervisory work and management, personnel management, occupational health and safety etc. The Regional Networks regularly organize Network meetings. thousands of participants have attended almost 60 local and national Network meetings. The Tyhy-Network has created an excellent platform for discussion and the joint development of the aims of well-being at work. It is a platform on which to share good practices and hidden traps. Networking is a different way of working. We have learnt a lot. Networking means trust and commitment, and creating such behaviour, as the process will take time and requires patience. Based on our experience so far, this has all been worthwhile. Keywords: Work well-being, network, good practice, multiprofessional co-operation.

**Keywords.** Work well-being, network, good practice, multiprofessional co-operation
Partnerships related to occupational risk prevention in SMEs

*paper included in Conference Proceedings*

**Author:** Gérard ROPERT, Caisse Régionale d'Assurance Maladie d’Ile-de-France / France

**Abstract**
Considering the gap between the important needs aiming safety, on one hand, and the effective means of direct intervention hold by OSH Social Security Institutions on the other hand, it appeared absolutely necessary to complete public activities by a policy of cooperation with social partners.

Employee’s involvement is considered to be a major challenge for controlling risks in a company; it was also decided to organize training courses being them dedicated. The actors of these trainings are either directly social partners or accredited training organizations.

The Regional Insurance Fund funds these trainings for prevention of occupational risks designated to trade unions and employer’s organizations. It further commits to assist, advice and help the partner organization or the training organization.

As such, agreements have been signed with certain professional federations in order to reduce specific risks: CAPEB agreement on accompanied driving of apprentices in the construction industry, with UNPPD in order to promote the prevention of occupational risks in this activity sector...

In order to ameliorate the quality of this approach, the 13 Sections of the International Social Security Association have developed seminars with various programs.

This partnership with international dimension demonstrates a real willingness to reduce the claims in these companies and enables SMEs to have "good practices" having operated in countries which have experienced.

It’s a rather important question, because there is a large part of employees who work in SMEs which have not strong safety and health structure as in major companies.
WORKSHOP 5.4 Special Session: Roundtable discussion on proposals for research based on the ESENER-2 dataset

Chair: William Cockburn
ROOM: F1.22

Roundtable discussion - Roundtable discussion on proposals for research based on the ESENER-2 dataset

Content Description

EU-OSHA’s second European Survey of Enterprises on New and Emerging Risks (ESENER-2) was completed in 2014, interviewing almost 50,000 establishments across all activity sectors in 36 countries. The survey helps fill an important information gap in the world of occupational safety and health (OSH), particularly for the smallest business sizes as ESENER-2 covers establishments employing at least five people - the dataset, as for ESENER-1[1], will be available at the UKDA site. Information on ESENER-2, including a ‘First findings’ and a ‘Summary’ report, as well as methodological reports, is already available at: www.esener.eu

The aim of this session is to have an interactive exchange of ideas and proposals for further in-depth research based on the ESENER-2 dataset. It may be relevant to bear in mind the topics that were covered as part of the in-depth analyses of ESENER-1:

- Worker representation and consultation on health and safety.
- Management of occupational safety and health.
- Management of psychosocial risks at work.
- Drivers and barriers for psychosocial risk management.
- Analysis of the determinants of workplace occupational safety and health practice in a selection of EU Member States - Report and Executive Summary.
- Two more methodological projects: Ex-post evaluation and a Qualitative post-test.

Also, and concerning ESENER-2, two projects are currently under way, to be completed by the end of 2016:

- Worker participation in the management of OSH.
- Joint analysis of the ESENER-2 and the LFS 2013 ad-hoc module on ‘accidents at work and other work-related health problems’.

Having this information in mind, the topics for discussion and the approach in this session can be both more policy-and-praxis-oriented (what works, why, where, and how do we help spread best practices) bearing in mind EU-OSHA’s mandate, as well as more academic (on research outcomes, methods, agendas). It may be worth too exploring the potential for carrying out analyses based on some of the changes of ESENER-2 with respect to ESENER-1, namely the expansion of the target population to (1) include establishments in agriculture and fishing sector and (2) the smallest establishment size is employing five workers rather than ten.

The roundtable will include a panel of at least three invited discussants and will be chaired by Mr William COCKBURN, Head of the Prevention and Research Unit, EU-OSHA.


WORKSHOP 5.5 Special Session: Partnering with Small Business Enterprises to Conduct Health Promotion Research

Chairs: Laura A. Linnan

ROOM: F1.23

Partnering with Small Business Enterprises to Conduct Health Promotion Research

Content description

Rationale: The USE conference provides a forum “to enhance our understanding of small enterprises as well as a unique focus on the well-being of both people and business”. However, small businesses are under-represented in research on occupational health and safety. Moreover, while recruitment and retention of individual participants in a research study has been carefully studied; very little research is available on the recruitment of organizational settings - often a necessary first step in most community-based intervention trials. Two experienced researchers will share strategies for successfully, and efficiently recruiting several types of small business enterprises into health intervention trials. Topics of discussion include: identification/enumeration of small business settings; recruitment protocols and materials, record-keeping and data management; and costs.

Aims: Participants in this workshop will increase their knowledge and practical skills for recruiting small business enterprises into health and safety intervention research trials. This will be a highly interactive session with initial introduction of the panelists, brief overview of each small business, and overview of key discussion points followed by Q&A with each presenter. Then, participants will engage in a small group activity where participants are assigned a "new" type/sector of small business (e.g. not one discussed by the presenters) and work through issues of identification/enumeration; protocol development; record-keeping and costs. A final discussion with tips, strategies, lessons learned challenges and opportunities for future research will be identified in a report back session with all workshop participants.

Workshop Co-Chairs:

- Laura A. Linnan, ScD | Professor, Department of Health Behavior
  Director, Carolina Collaborative for Research on Work & Health

- Guadalupe X. Ayala, PhD, MPH | Professor, San Diego State University
  Associate Dean for Research
SESSIONS 6.1 – 6.5

WORKSHOP 6.1  OSH: occupational health services and SMEs

Chair: Helena Palmgren

ROOM: F1.19

Small Enterprises’ and Entrepreneurs’ Experiences of Occupational Health Services in North Karelia

Authors: Kristina Rajala, Simo Kaleva and Helena Palmgren (Finnish Institute of Occupational Health)

E-mail: kristina.rajala@ttl.fi

Abstract. Problem statement and aim
Occupational Health Services (OHS) is the main device to support occupational health and work ability in Finland. Only 10% of entrepreneurs and self-employed and 77% of small enterprises have utilized OHS. In order to successfully develop OHS for these clients, it is important to know how they experience the services. The experiences of SE’s and entrepreneurs about OHS were investigated in North Karelia region in 2013.

Material and methods
The questionnaire study focused on the coverage of OHS, reasons for arranging or not arranging the services, experiences of the services and information needs concerning OHS. The material of the study was based on a random sample of North Karelian enterprises provided by Statistics Finland. 42 of 221 respondents answered the questionnaire (response rate 17%). The questionnaire was also sent to the 65 participants of the Female Power project and an open link to the members of the North Karelian Federation of Finnish Enterprises. The response rate of the former was 58%. The total data consisted answers of 188 entrepreneurs of whom 55% were self-employed, 37% SEs and 7% enterprises owned by two partners. The data was analyzed using SAS statistical program version 9.2.

Results
Only half of the respondents had arranged OHS. The most important reasons for acquiring the services were either the statutory nature of OHS or that the maintenance of work ability was regarded as important. The main reasons for not arranging the services were the following: they were too expensive (37%); the entrepreneur was too busy (27%) or did not know how to arrange the services (24%); the employers thought that if they paid for other health services, they were not obligated to arrange OHS to their employees (20%). Furthermore, 18% of the self-employed were not aware of their right to arrange OHS for themselves. Development needs for OHS are a holistic view of the client company’s operations, more information about OHS, joint planning and developing the services, more health promotion and less expenses.

Conclusions
In order to help entrepreneurs and SEs to utilize OHS in maintaining their work ability, more information about the services is needed. In addition, the financial incentives should be reconsidered, to enable the entrepreneurs to purchase OHS and to improve the coverage of OHS among SEs and entrepreneurs. At the moment, entrepreneurs appreciate OHS, but to ensure, that the services answer to their needs, the cooperation between OHS professionals and entrepreneurs should be strengthened.

Keywords. small enterprises, entrepreneurs, occupational health services, questionnaire study
How to enable Small Enterprises arrange Occupational Health Services?

Authors: Helena Palmgren, Simo Kaleva, Kristina Rajala and Minna Savinainen

Email: helena.palmgren@ttl.fi

Abstract. Problem statement and aim
At the moment, 99% of the Finnish private enterprises are small enterprises (SEs). Along with the growing importance of SEs to the Finnish economy, concerns about health, safety and work ability in SEs have increased as they are seen to be preconditions for productive work and successful business. In Finland, occupational health services (OHS) is the main service system that helps enterprises promote work ability. However, entrepreneurs and SEs are not fully covered by the OHS system. Based on a nationwide study, this paper discusses ways of enhancing the possibilities of SEs and entrepreneurs to arrange OHS and get support to well-being at work.

Material and methods
The questionnaire study was conducted between 1.1.2013-31.12.2014, and directed to entrepreneurs and SEs, OHS units and personnel, and experts of business services. The questionnaires focused on knowledge concerning OHS among entrepreneurs and SEs and ways of improving the coverage of OHS. Also the usage of the services were asked from entrepreneurs, SEs and OHS providers. The data of SEs was produced by Statistics Finland and based on a stratified random sample of 7734 SEs from different business sectors and geographical areas in Finland. The data of OHS included all OHS units serving SEs (N=276) and the personnel of the units (N=3864).The business services data consisted of experts working in all business service units belonging to the national business service network of the Ministry of Employment and the Economy (N=1304). The response rate of the SEs was 13 (n=1023), OHS units 64 (n=176), OHS personnel 29 (n=1108), and business service experts 43 (n=566).

Results
OHS was arranged by 10% of the entrepreneurs and 77% of the SEs. 21% of the entrepreneurs thought that OHS was meant only to employees, and 15% of the SEs were not aware of their legal duty to arrange OHS. For the entrepreneurs and the SEs, the most functional way of helping them arrange OHS was by providing more information about the content (29%), the costs (48%) and the purchase of the services (28%). These views were shared by most of the OHS providers (83 %) and their personnel (78%). Still, only 17% of the OHS providers marketed their services to entrepreneurs and 22% to SEs. 76% of the business service experts were willing to provide information about OHS to their clients. So far, the cooperation between OHS providers and the business services was unusual: 77% of the business services experts and 90% of the OHS providers had had cooperation with each other never or very seldom.

Conclusions
At grass root level, informing small business owners about OHS as a part of business service consultation is an example of how to integrate business development and work ability promotion in practice. In the wider context, strengthening collaboration between the occupational health and safety system and business service system at the national, regional and local level can provide us with manifold ways to ensure that entrepreneurs and SEs get support both to business development and well-being at work.

Keywords. small enterprises, entrepreneurs, occupational health services, business services, questionnaire study
Preventing mismatch? A regional labour market pilot.

*paper included in Conference Proceedings*

Authors: H.A.M. van Lieshout, M.C.T. Geling and A. Scholing, Centre of Applied Labour Market Research, Hanze University of Applied Sciences

Abstract. In 2013 the Centre of Applied Labour Market Research (Kenniscentrum Arbeid, KCA) has developed a method for data collection to get an insight in employer’s future demand for staff. The method is developed to contribute to solve an action problem in the Eemsdelta region. Despite indications of a threat of shortage of technicians in that region, none of the regional actors undertakes action. They miss detailed information about the employers’ future demand for staff. To be able to take tailor-made measures, the actors must have a proper idea of the labour market problems which can be traced back to company level. For each job opening must be clear to which profession it is related and to which educational specialization and educational level. These information appears to be not available. For employers it is, understandable, difficult to estimate their future demand for staff, because a lot of uncertain factors influences that need. Especially SME’s who often don’t have a HR-officer are missing the knowledge and time or money to invest in making a future picture of their need for staff. And data from existing labour market information sources can’t be translated well at regional or local level, never mind at company level. Without detailed information about the future employer’s demand for staff, possible problems stay latent. There is no sense of urgency for the employers to take action and the regional policy makers are missing information to develop specific educational and labour market policy. To get the needed detailed information, it has to be obtained from the employers themselves, at company level. During a research pilot in 2013 KCA has designed a method for data collection and practiced it with nine companies in the Eemsdelta region. The results indicate that the method works. In a relatively labour-extensive way the needed information can be obtained. At company level it gives the employer insight in his actual and future staff requirements and makes him aware of possible problems. As regards to the policy makers, the pilot was too small for a complete regional picture, but it demonstrates that the anonymised data of the individual companies can be merged to one umbrella data-file. From that file analyses can be made to find trends and possible problems at the labour market, both at regional and sectoral level and to obtain input for developing effective policy. The successful results of the pilot offers good reasons for a follow-up study with much more companies and to develop the method into a complete labour market monitor, by broadening the method with data about the labour supply and data of new employers.

Keywords. Regional labour market pilot, Eemsdelta region, employers’ future demand for staff.
**WORKSHOP 6.2  Governance in SMEs**  
*Chairs: Frank Jan de Graaf and Hugo Velthuijsen*

**ROOM: F2.13**

**Networks of small and medium-sized enterprises – a potential policy instrument to promote health and safety?**

*paper included in Conference Proceedings*

**Authors:** Grøn S.¹ and H.J. Limborg¹

¹Team Worklife, Denmark

**Email:** sig@teamarbejdsliv.dk | hjl@teamarbejdsliv.dk

**Abstract.** The Nordic countries have a large number of small and medium sized enterprises (SMEs), and it is a well-documented problem, that many SMEs find it difficult to address their health and safety challenges. It is also a problem that the regulative bodies find SMEs difficult to address in a way that match their circumstances. Researchers and regulatory bodies lack an in-depth understanding of how small and medium sized enterprises (SMEs) make decisions about workplace health and safety improvements and the role played by business networks in these decisions.

To improve regulation and support there is a need to create the means to empower SMEs to work systematically with occupational health and safety, and it is our assumption that engagement in a network can motivate and help the companies to work with health and safety issues.

In an ongoing research project, we study and compare three cases in which groups of small enterprises have formed networks to solve a health and safety oriented challenge: A group of dairies, brewers and demolishers. From a realistic theory perspective, we have analyzed data describing the process of addressing a health and safety issue in each case. The data was obtained through qualitative interviews, document analysis and observations and our analysis focuses on the internal and external mechanisms that are driving the processes. We conclude that given that both external pressures and internal motivations are present the SMEs benefit from engaging in networks to improve their health and safety conditions, thus we find that facilitation of networks has potential as a policy instrument.

**Keywords.** Network, Small and mediumsized enterprises, Policy Instruments, Occupational Health
**Intercultural Competence @ SMEs**

*paper included in Conference Proceedings*

**Author:** Marcel H. van der Poel - Hanze University of Applied Sciences Groningen

**Email:** m.h.van.der.poel@pl.hanze.nl

**Abstract.** The experiences with intercultural competence training at the Hanze International Business School Groningen may serve as a blueprint for augmenting professional intercultural behaviour at the SME work floor. The set-up of the training is based on current intercultural communication theory and models, and has as its basic assumption that a change in worldview will make a change in behaviour more likely and feasible. Test results and interviews reveal that the worldviews of 34 participants have changed between the start and the end of the training.

**Keywords.** intercultural competences, diversity management, multiculturalism, organizational behavior, internationalization
Reviewing the relationship between technological innovation and internationalization from a dynamic capabilities’ perspective

*paper included in Conference Proceedings*

**Author:** Jaan Kets

**Email:** j.kets@pl.hanze.nl

**Abstract.** Considerable attention has been paid to the reciprocal relationship between technological innovation and internationalization. However, despite research efforts in identifying if and how these two strategic processes influence each other, the literature is inundated with inconsistencies, contradictions and heterogeneous in terms of theoretical approaches applied. This paper reviews and critically examines the empirical literature on the relationship between technological innovation and internationalization. Building upon the dynamic capability view, we distinguish between sensing, seizing and reconfiguring aspects of technological innovation and internationalization and use it as a framework to organize the empirical literature. A systematic analysis of seventy-two journal articles published in leading journals over the last 25 years reveals that the majority of the empirical studies largely focus on seizing and not on sensing and reconfiguring. We present a set of propositions that outline 1) how technological innovation and internationalization are related processes in firms 2) how this relationship is mediated by co-ideation and co-innovation 3) how entrepreneurial orientation leads the sensing and seizing of opportunities and reconfigures the resources base. Our discussion and model help to delineate key differences in the relationship between technological innovation and internationalization that firms have.

**Keywords.** internationalization, review, dynamic capabilities, technological innovation
Developing a viable business model for community owned solar farms in the Netherlands

*paper included in Conference Proceedings*

Authors: A. D’Souza¹, H. Velthuijsen¹, J. C. Wortmann² and G. B. Huitema²
¹School of Communication, Media & IT, Hanzé University of Applied Sciences, Zernikeplein 11, Groningen, The Netherlands.
²Faculty of Economics, and Business, University of Groningen, Nettelbosje 2, Groningen, The Netherlands

Abstract. Purpose: The energy industry is experiencing a tremendous growth in the number of energy cooperatives in Europe. These energy cooperatives are spearheading the transition to a sustainable energy system. The energy cooperatives aim to satisfy the consumers demand for sustainable energy and related services. Grunneger power is such a cooperative in the north of the Netherlands. They aim to setup and exploit community owned solar farms in the north of the Netherlands. In order to successfully setup and exploit community owned solar farms, Grunneger power needs a viable business model. However, existing literature treats the business models of energy cooperatives superficially. In particular, there is not much information on the business model of community owned solar farms. Designing a viable business model for community owned solar farms is a complex task because it spans several organisations. This implies that the business model has to be able to deal with the competing interests of the organisations. In addition, they have to be able to facilitate value capture by each of the participating organisations such that they are committed to the business model. Additionally, the literature on business model design is missing a comprehensive artefact that can facilitate the design of viable business models in a business ecosystem setting. Therefore, the goal of this paper is twofold: i) to design a viable business model for community owned solar farms that will be setup in the north of the Netherlands. ii) To present the findings from this case study, and to propose generalisations that are relevant for the development of artefacts that can be used to facilitate the design of viable business models in a business ecosystem setting.

Design/methodology/approach: The design science research approach is best suited for designing artefacts, and drawing generalisations from the design process. Since our goal is to design an artefact and draw generalisations from the lessons learnt, we frame this research as a design science research problem. Additionally, we have used business model ontologies to design the business model. Business model ontologies are languages use to conceptualise and communicate business models.

Findings: It was hard to design a viable business model for community owned solar farms, due to the competing interests of different organisations. It was necessary to have a clear business service concept before starting the business model design. Furthermore, in order to design a viable business model it was necessary to conceptualise the business model from Grunneger power’s perspective as well as from a business ecosystem perspective. In addition, to arrive at a viable business model, we had to eliminate the traditional energy retailers from the business ecosystem because they were not adding sufficient value. Further, the role of traditional energy retailers and the associated value creation activities, value streams, and captured value had to be reallocated to a different stakeholder within the business ecosystem. Moreover, the viability of the designed business model is sensitive to several factors, such as availability of subsidy, the assumed operational costs of the solar farm, wholesale price of electricity, cost of capital, etc.

Originality/Value: Without much guidance from literature, firms such as Grunneger power rely on trial and error methods for finding viable business models. These trial and error methods of finding a viable business model are risky, expensive, and time consuming. Therefore, this research addresses the above-mentioned gap by designing a viable business model to exploit the community owned solar farms that is directly implementable by cooperatives such as Grunneger power. In addition, several generalisations, relevant to the development of business model design artefacts are drawn from this research, for example it is crucial for firms operating in business ecosystem setting to approach business model design from the perspective of the focal firm as well as from the perspective of a business ecosystem.
Multidimensional diagnosis of the work environment in SMEs

Authors: Ivan Silva and Carolina Cuadra
Email: isilva@mutual.cl

Abstract. PROBLEM STATEMENT AND AIM
CChC Mutual Security is one of the nonprofit companies that administer the law on occupational accidents and diseases in Chile. The SMEs account for about 88% of the companies participating in Mutual. One of their most significant features is the limited number of workers they possess, averaging 11 workers, hence the high impact that absenteeism has on them, regardless of the cause of origin (labor or common).
During 2013, CChC Mutual Security agreed to participate in the proposed model adaptation "Healthy Workplaces" to small and medium enterprises in Latin America. This model includes 4 dimensions to analyze at the workplace: Physical Environment, Psychosocial Environment, Personal Health Resources and Community.

MATERIALS / METHODS
The diagnosis was made in 4 small and medium enterprises, which volunteered for the project and engaged in different economic activities. Surveys and site visit were used. The physical environment was assessed using field diagnostic focused on general hazards and basic legal requirements. Psychosocial Avenue was assessed via questionnaire SUSESO-ISTAS 21, validated for the Chilean population, which measured 5 dimensions through 20 questions (psychological requirements, active work, social support and quality of leadership, compensation and double presence). Personal Health Resources and Community, were measured by a questionnaire constructed to lift needs in: access to health services, lifestyles (nutrition, hydration, physical activity, alcohol consumption, drug use and smoking) and business - community / society relationship (inclusion, discrimination, balance work / family, etc).
Surveys were applied personally to workers, previous informed consent. The data was analyzed for each company, delivering integrated reports with the trends found in each dimension.

RESULTS
Among the diagnostic results evaluated, stands out that the SMEs have between 23-50 employees. The average percentage of men is 79%. In physical environment, legal regulations are met and non-critical hazards were found. In psychosocial environment two companies presented high risk in the double presence dimension, one presented medium risk in social support and quality of leadership and the last one didn’t present risks. In Personal Resources and community, stands out high use of health services, facilities to assist health checks during working hours, 64% do not smoke, 81% drinks less than 2 liters of water a day and 27% are physically active more than 3 times a week. None SMEs had disabled workers or re-insertion labor programs.

CONCLUSIONS AND / OR IMPLICATIONS
It is necessary to generate an assessment of the work environment that’s not reductionist regarding workers health, adding to the labor component every other health aspect that can be attributed to non-occupational causes. An intervention that is based on a comprehensive diagnosis will allow us to be more effective in health prevention and promotion and, on the other hand, with higher future sustainability.

Keywords. Healthy Workplaces, SMEs, Lifestyles, ISTAS 21, Multidimensional Diagnosis
The financial incentives for SMEs OSH activities in France

*paper included in Conference Proceedings*

Author: Jean-Claude Poirier - Caisse Régionale d’Assurance Maladie d’Ile-de-France (CRAMIF) / France

Abstract. At the very beginning, of OSH in 1946, this approach was mainly based upon control of dangerous situations at work and financial sanctions in case of persistence of those perilous situations.

But the human resources of OSH Social Insurance Institutions are only able to check the safety in about 3% of enterprises, and peculiarly the greatest ones with a lot of employees.

So, it appeared necessary to find other ways of interventions towards SMEs. It implicates to offer technical tools as responses to technical or organizational levels on one side, and financial helps on the other side.

For being eligible for getting financial support, companies must fulfil conditions and propose programs within the frame of the principles of the National Convention of Objectives for the sector on which it depends.

This is a new philosophy which gets more and more success among SMEs, because it is rather easy procedure which replaces control by confidence.
SME Business Leaders’ Motivations and Barriers in Workplace Safety and Health Leadership

*paper included in Conference Proceedings*

**Authors:** J. Chen¹ and K. C. Tan²

¹Workplace Safety and Health Institute, Singapore
²Ministry of Manpower, Singapore

**Email:** joann_chen@wshi.gov.sg | tan_kee_chong@mom.gov.sg

**Abstract.** In Singapore, 99% of businesses are small and medium enterprises (SMEs). Business leaders play an influential role in raising workplace safety and health (WSH) standards through their leadership. The aim of the study was to understand SME business leaders’ motivations and barriers, and how they influenced their WSH leadership behaviours. Telephone interviews were conducted with 123 participants. SME business leaders’ most commonly cited WSH motivations were a concern for their employees’ wellbeing and accidents being costly to businesses. Importantly, 22.8% of participants expressed no motivation in WSH. Generally, SME business leaders’ WSH barriers were uniformly attributed to a lack of expertise, financial resources, time, and difficulties in encouraging employees’ compliance to WSH. SME business leaders who had a motivation to improve WSH in their companies demonstrated significantly greater WSH leadership involvement, as compared to those with no motivation. A significantly higher proportion of SME business leaders who had no motivation in WSH (60.7%) were unaware of the WSH risks in their businesses, as compared to those with a WSH motivation (23.2%). Our findings imply the importance of raising a business leaders’ awareness of WSH risks in their business operations if some form of behaviour change is to occur.

**Keywords.** leadership, motivations, barriers, behaviours
Diffusion of an integrated approach to health, safety, and wellness for smaller businesses: Perspectives from intermediary organizations.

*paper included in Conference Proceedings*

**Authors:** T.R. Cunningham¹ G. Burnett¹ and B. Jacklitsch¹  
¹National Institute for Occupational Safety and Health, United States of America

**Email:** TCunningham@cdc.gov | BJacklitsch@cdc.gov | PSchulte@cdc.gov

**Abstract.** The National Institute for Occupational Safety and Health (NIOSH) Total Worker Health™ (TWH) Program considers the fact that both work-related factors and factors beyond the workplace contribute to the health of workers and their families. The Program conducts research on the effects of combining occupational safety and health (work-related factors – OSH) and workplace health promotion (lifestyle factors – WHP) at the worksite in order to achieve synergy that increases effectiveness and efficiency. There is no data available on the prevalence of TWH programs in smaller organizations. What is known about smaller organizations is divided into information about health protection and health promotion activities. Smaller organizations engage in fewer safety activities and fewer health promotion activities than larger organizations, and firm size is the best predictor of both safety and health promotion activities in each respective stream of research. Efforts to encourage and assist smaller organizations with workplace health protection activities have used an initiator-intermediary-small organization model. The model presumes initiator organizations such as public health agencies lack the resources to affect appreciable numbers of small organizations that need assistance, and community organizations that already have relationships with smaller enterprises may deliver employee health protection information, goods, and services as part of the value they offer those organizations. The current project is conducting parallel community-based activities in southwestern Ohio and northern Kentucky. It will collect and analyze data about the perceived cost/benefits of the TWH approach using a two-level (community organizations and employers), pre-test/post-test measurement (one year apart) method. Data is being collected from community organizations that work with or serve small businesses about their perceptions of the TWH approach as a potential product or service for them to offer small firms. Community organizations are collecting and analyzing data about the perceived cost/benefits of TWH as perceived by small businesses in the respective geographic areas. Sample TWH information and services will be used to incentivize employer participation. Perception data will be collected and analyzed in both geographic areas and at both the community organization and small business level after approximately one year. The project will use these analyses to develop a model for TWH diffusion to small businesses. The community organizations will then engage in diffusion activities to encourage the use of the model by national, regional, state and other local organizations serving small firms. While data collection is still in process, preliminary results will be presented from our interactions with community organizations and their initial interactions with small businesses.

**Keywords.** integrated approach, wellness, intermediary, community organization, NIOSH
WORKSHOP 6.4 SESAME
Chair: Monique Ramioul
ROOM: F1.20

Safe Small and Micro Enterprises – What works and why it works... Outcome from the State-of-Play research of the SESAME project.

Author: Monique Ramioul, HIVA- Research Institute for Work and Society, University of Leuven (Belgium).

Email: Monique.ramioul@kuleuven.be

This presentation will provide an introduction to two workshops of the USE-conference 2015 on occupational health and safety strategies and practices in micro and small enterprises in Europe. The presentation will synthesise the main outcome of Work Package 1 ‘State-of-play’ of the SESAME project – Safe Small and Micro Enterprises. This project is being carried out for the European Agency for Safety and Health at the Workplace (EU-OSHA). The project runs from 2014 to 2017 and brings together expert research teams from nine EU Member States that are each representative of different types of occupational safety and health ‘regimes’ (policies, regulations and practices) and their socio-economic and regulatory contexts. The main aim of SESAME is to collect, analyse and disseminate new and comprehensive knowledge and understanding on: policies and strategies; tools and resources; and workplace views and practices with regards to OSH in micro and small enterprises.

In the first work package, that will be finalised in October 2015, five SESAME partners conduct an in-depth review of available data relevant to OSH in micro and small enterprises (MSE) in the EU. The review includes facts and figures enabling the construction of an EU profile on OSH outcomes in these enterprises. It identifies knowledge to date on the main external and internal determinants of arrangements for OSH in micro and small enterprises in order to identify the major variables that impact on their arrangements for OSH. WP1 also provides an account of the range of strategies and resources available to support improvement in these outcomes and arrangements, and a critical analysis of their effectiveness. The methods used are: literature reviews, data analysis (different data sources) and realist evaluation.

Keywords: occupational health and safety, micro and small enterprises, state-of-play
How can context affect what strategies are effective in improving the working environment in small companies?

Authors:
Ann-Beth Antonsson, IVL Swedish Environmental Research Institute
Peter Hasle, Centre for Industrial Production at Aalborg University.

E-mail: ann-beth.antonsson@ivl.se | hasle@business.aau.dk

Abstract. The National Institute for Occupational Safety and Health (NIOSH) Total Worker Health (TWH) Program considers the fact that both work-related factors and factors beyond the workplace contribute to the health of workers and their families. The Program conducts research on the effects of combining occupational safety and health (work-related factors – OSH) and workplace health promotion (lifestyle factors – WHP) at the worksite in order to achieve synergy that increases effectiveness and efficiency. There is no data available on the prevalence of TWH programs in smaller organizations. What is known about smaller organizations is divided into information about health protection and health promotion activities. Smaller organizations engage in fewer safety activities and fewer health promotion activities than larger organizations, and firm size is the best predictor of both safety and health promotion activities in each respective stream of research. Efforts to encourage and assist smaller organizations with workplace health protection activities have used an initiator-intermediary-small organization model. The model presumes initiator organizations such as public health agencies lack the resources to affect appreciable numbers of small organizations that need assistance, and community organizations that already have relationships with smaller enterprises may deliver employee health protection information, goods, and services as part of the value they offer those organizations. The current project is conducting parallel community-based activities in southwestern Ohio and northern Kentucky. It will collect and analyze data about the perceived cost/benefits of the TWH approach using a two-level (community organizations and employers), pre-test/post-test measurement (one year apart) method. Data is being collected from community organizations that work with or serve small businesses about their perceptions of the TWH approach as a potential product or service for them to offer small firms. Community organizations will collect and analyze data about the perceived cost/benefits of TWH as perceived by small businesses in the respective geographic areas. Sample TWH information and services will be used to incentivize employer participation. Perception data will be collected and analyzed in both geographic areas and at both the community organization and small business level after approximately one year. The project will use these analyses to develop a model for TWH diffusion to small businesses. The community organizations will then engage in diffusion activities to encourage the use of the model by national, regional, state and other local organizations serving small firms. Based on this research, NIOSH will work with community organizations and small businesses to design a model for implementation of TWH services and programs, using a Diffusion of Innovations approach that takes into account the motivations and resources of both small businesses and community organizations. NIOSH will also evaluate shifts in perceptions over time as exposure to TWH approaches accumulates during the project. While data collection is still in process, preliminary results will be presented from our interactions with community organizations and their initial interactions with small businesses.

Keywords. context, strategies, implementation, small companies
What kind of knowledge do small companies need to improve their working environment?

Authors:
Ann-Beth Antonsson, IVL Swedish Environmental Research Institute
Peter Hasle, Centre for Industrial Production at Aalborg University.

E-mail: ann-beth.antonsson@ivl.se | hasle@business.aau.dk

Abstract. Background
One of the main obstacles identified for small companies’ improvement of the working environment is lack of knowledge.

Aim
To discuss what kind of knowledge is required by small companies if they are to be able to improve their working environment and the pros and cons of different kinds of knowledge from a small company perspective.

Discussion
There are several different ways of describing knowledge. From a working environment point of view, knowledge can be divided into knowledge about risks, risk assessment and control measures. Control measures can in turn be divided into knowledge about the concrete control measures and the management routines needed in the company. Another kind of analytical framework has been presented by Rasmussen, who divides knowledge into skill-based, rule-based and knowledge-based behaviour. Rasmussen describes that skill-based knowledge is the automated knowledge that is so integrated that we do not even reflect upon it. Rule-based knowledge requires a decision to apply and follow a rule whereas the knowledge-based require more time and reflection to arrive at a conclusion. The risk of making mistakes and arriving at wrong conclusions is increasing when moving towards knowledge-based behaviour. Additionally the time required increases when moving from skill- to knowledge-based behaviour. On the other hand, skill-based behaviour lacks the ability to solve problems and adapt to new situations.

In the working environment risk assessment as well as the development of management routines are typically knowledge-based activities, whereas the application of good practice is more of skill or rule-based.

For small companies, time as well as knowledge is an important constraint for the work environment management. Therefore the conclusion could be to focus on and provide skill- and rule-based knowledge to small companies. Description of good practices is one way of doing this. The good practices should however focus on control measures in order to be helpful to small enterprises. In fact, small companies often ask for concrete advice on how to solve problems, rather than routines for risk assessment or risk management. However, there is a lot of criticism towards this kind of good practice, ranging from that it can easily be used for behavioural control to the problem with odd working environments and the need for tailoring the solutions to each workplace.

The pros and cons with providing different kinds of knowledge will be discussed from a theoretical point of view. This question will be further scrutinized in the project SESAME, which aims at developing strategies to improve the working environment in SME:s

Keywords. Small companies, knowledge, tolls, implementation
Addressing the ‘workers standpoint’ on health and safety in small and micro firms

Author: Professor David Walters, Cardiff University
Email: waltersd@cardiff.ac.uk

Abstract. At the first USE Conference, ten years ago, the Canadian scholar Joan Eakin gave an eloquent address in which she examined the approach to health and safety in small firms from a perspective in which workers’ interests and concerns were foregrounded. She pointed out that most research, intervention and policy development up to that point had tended to focus on the attitudes, behaviours and needs of the owners and managers of small firms who are the employers of workers in small firms. In the SESAME project in which we are examining the state of play in relation to health and safety in small and micro firms in the member states of the European Union, we are also attempting to take into account the ‘workers standpoint’. In this paper I outline some of the findings from our review of existing research in this respect and ask to what extent and with what effect this standpoint is addressed.

Keywords. SESAME, workers, health and safety
WORKSHOP 6.5  Market Orientation in Health Care
Chair: Karel-Jan Alsem
ROOM: F2.15

How good are health care companies at branding?

*paper included in Conference Proceedings*

Authors: K.J. Alsem¹ and E.J. Kostelijk¹
¹Hanze University of Applied Sciences, Groningen, The Netherlands

Email: k.j.alsem@pl.hanze.nl

Abstract. This study investigates whether the core values health care providers express are distinctive. This is relevant since with increasing competition in health care, providers should be clear in their branding towards all stakeholders. By means of a questionnaire, a sample of 141 health care managers provided the core values of their organization. We aggregated these self-stated values in 11 main value dimensions. Two dimensions are dominantly used by care providers: 'care and affection' and 'functionality'. Since so many companies have comparable values whereas these values are also typical 'category dimensions', our conclusion is that health care companies are not good at differentiating on values.

Keywords. Health care, marketing, branding, competition
Decision-making process in elderly care: an explorative study

*paper included in Conference Proceedings*

Authors: L. Visser¹ and D.J. de Jong¹
¹School for Marketing Management, Hanze University Groningen UAS

Email: l.visser@pl.hanze.nl | d.j.de.jong@pl.hanze.nl

Abstract. Currently many changes are taking place in the elderly care: care is changing from supply-oriented to demand-driven, problems have to be more serious than previously to get a placement in a nursing home, furthermore the demand for heavier care will increase due to ageing. The aim of this study is to acquire a clear insight in the decision-making process with regard to placement in a nursing home facility. Semi-structured interviews were held with various stakeholders (n=24) in the three Northern Netherlands provinces aimed at gaining insight into who is involved in the decision-making process, sources that are used by decision-makers to require information and the criteria that are involved in the decision process. The results of the study show that the following persons are involved in the decision-making process whether or not the client will get intramural care: the client, a possible partner in dialogue with the family, the family, employees of the home care organization, the general practitioner and (if involved with the client) a case manager. The first three mentioned persons are also important contributors to the decision about at which nursing home facility the client will be placed, but the final decision is mostly made by the family. Furthermore the study shows that the internet, especially the website of the nursing home, is an important source of information for the family. A short distance to the current home or to the family have shown to be an important selection criterion. Also positive experience of other people and/or familiarity with the nursing home, domesticity and a positive attitude of the employees to the family and the client might be important criteria.

Nursing home facilities should focus on the family, especially on the children of the client, in their marketing communication. Furthermore they should share positive experience of clients and/or their family on their websites. Furthermore health care organizations have to take care that they are known by persons involved with possible clients, including the client and/or the family and the general practitioner. Finally the nursing home facilities should further distinguish from each other.

Keywords. decision-making; elderly care
The CQI as a predictor of resident satisfaction in nursing homes

*paper included in Conference Proceedings*

**Author:** J. F. A. Hoekstra, MSc¹,
ZorgfocuZ, research company co-founded by RUG Sociology

**Email:** j.hoekstra@zorgfocuz.nl

**Abstract.** The CQI is a mandatory questionnaire in the Dutch elderly care. We assume that the satisfaction of residents of nursing homes is predicted by the fulfilment of 5 basic needs according to the Social Production Function theory, 2 physical needs (comfort and stimulation) and 3 social needs (affection, behavioural confirmation and status). The CQI is tested by using it to predict the general satisfaction of residents, which it does for only 1/3 of the variance. We conclude that the CQI is not a strong predictor and, using the CQI, that social aspects are missing.

**Keywords.** Patient research, wellbeing, patient satisfaction, employee satisfaction
Development of a Participatory Workplace Environment Improvement Program to promote primary prevention for work-related stress in Japan

*paper included in Conference Proceedings*

**Authors:** E. Yoshikawa¹, T. Yoshikawa² and K. Kogi³

¹ Tokyo Ariake University of Medical and Health Science, Tokyo, Japan
² National Institute of Occupational Safety and Health, Kawasaki, Japan
³ The Institute for Science of Labour, Kawasaki, Japan, k.kogi@isl.or.jp

**Abstract.** The purpose of this study was two-fold: (1) to discuss the requirements for practical action-oriented tools for reducing stress at work in SMEs and, (2) to develop new “action tools” for primary prevention of job stress in a manner adjusted to SMEs. The reviewed interventions let do meaningful improvements when they built on local good practices for improving the work environment in multiple aspects and used action-oriented tools. We recognized the action toolkit useful for facilitating the wide-ranging improvements.

**Keywords.** Stress prevention, participatory approach, action tools, SMEs
Mental stress in SMEs

*paper included in Conference Proceedings*

Authors: J. Mields and C. Gericke. Berufsgenossenschaft Energie Textil Elektro Medienerzeugnisse
German Social Accident Insurance Institution for the energy, textile, electrical and media products sectors

Email: mields.just@bgetem.de

Abstract. A work aid specifically for the target group small enterprise has been developed in the present project. In five steps, it covers the process of risk assessment of mental stress: in-house communication, analysis of the load situation with all decisive factors, participation-oriented deriving actions, impact assessment and documentation. What is new about the action aid is the structured coupling of a survey instrument to a procedure of moderation which enables the development of effective measures with little effort.

Keywords. psychosocial and psychomental stress, risk assessment, small-sized enterprise, smallest enterprise
Psychosocial working conditions, health and life-style among leaders and co-workers in small-scale enterprises

*paper included in Conference Proceedings*

**Authors:** Stig Vinberg¹, Elisabeth Hansen¹, Lisa Markussen¹ and Bodil Landstad²
¹Department of Health Sciences, Mid Sweden University
²Nord-Trøndelag Hospital Trust, Norway

**E-mail:** stig.vinberg@miun.se

**Abstract. Problem statement and aim:** Small-scale enterprises (SSE) and self-employed individuals are regarded as important contributors to economic development. However, there is a limited understanding about the importance of the psychosocial working conditions, the work-life balance, health and well-being in these enterprises. Research on psychosocial working conditions in SSEs is polarized and shows contradictory results, and it is often stated that SSEs have trouble with workplace health processes due to their limited economic and personnel resources, and lack of support from e.g. Occupational and health services (OHS). Research shows that the self-employed experience high job satisfaction, and high levels of job control and job demands. The aim of this study is to explore the psychosocial working conditions, health and lifestyle among leaders and co-workers in SSEs.

**Keywords.** leadership, health, psychosocial working conditions, life-style, self-employed
The roles of voluntary facilitators in participatory work improvement and stress prevention programmes based on group work of their co-workers

*paper included in Conference Proceedings*

**Authors:** K. Kogi\(^1\), T. Yoshikawa\(^2\) and E. Yoshikawa\(^3\)

\(^1\)Institute for Science of Labour, Kawasaki, Japan
\(^2\)National Institute of Occupational Safety and Health, Kawasaki, Japan
\(^3\)Tokyo Ariake University of Medical and Health Sciences, Tokyo, Japan.

**Email:** k.kogi@isl.or.jp

**Abstract.** The roles played by volunteer facilitators in participatory work improvement and stress prevention programmes were studied. In both types of programmes, concrete improvements of workplace conditions were achieved by serial group work steps. The facilitators supported these steps by utilizing action checklists reflecting local good practices. In work improvement programmes, the facilitators focused on low-cost improvements in materials handling, workstations, physical environment and work organization, while for stress prevention the facilitators further focused on internal communication, information sharing and social support measures. These improvements had real impact on risk reduction. It was suggested crucial to build the capabilities of voluntary facilitators to assist co-workers in using action tools and apply simple, action-oriented group work procedures.

**Keywords.** participatory programmes, work improvement, stress prevention, action checklist, volunteer facilitators, good practices
An Exploratory Study of Factors Affecting Sustainability Adoption in Small and Medium-Sized Enterprises

*paper included in Conference Proceedings*

Authors: P. Salimzadeh¹, J. Courvisanos², R. R. Nayak³

¹ Federation University Australia
² Federation University Australia
³ Federation University Australia

Email: p.salimzadeh@federation.edu.au | Telephone: (+61) 3 5327 6811

Abstract. Primarily it is the owner/managers of Small and Medium-sized Enterprises (SMEs), supported by its employees, who are the internal groups effective in the adoption of sustainability in SMEs. Suppliers, government and customers are three external groups that can be effective in assisting the transformation of SMEs towards sustainable development. There are significant internal factors which impact on the ability of owner/managers to adopt sustainable practices, like perception of environmental and social impact, cost of sustainability implementation, level of sustainability knowledge of owner/managers and their attitudes and commitment to sustainable development. The significance of these factors becomes heightened in regional (non-metropolitan) areas which are geographically isolated from central nodes of sustainability knowledge. This paper examines key factors behind the adoption of sustainability in SMEs operating in a regional city of Australia. First, measurement scales for the affecting factors were developed and validated. Then the paper used survey data from 233 SMEs in the regional city of Ballarat which is located in Western Victoria, Australia. Findings reveal that the most effective factors appear to originate inside SMEs rather than outside. This paper contributes to the investigation of influencing factors on sustainable business development within SMEs, highlighting significant implications for both theory and practice in the context of a non-metropolitan urban setting.

Keywords. SMEs; Sustainability; Non-metropolitan Urban Setting; Sustainability Adoption Factors
Social Acceptance of Sustainable Issues. A Discourse Analysis of how people speak about bio-digestion

*paper included in Conference Proceedings*

Authors: M. Harmelink, MA ¹ and J.M.E. Klarenbeek, PhD¹
¹Hanze University of Applied Sciences, Groningen, The Netherlands

Abstract. For successful energy transitions, social acceptance of innovative technologies is essential. In order to determine the contributing factors, the acceptance of bio-digestion in The Netherlands was analyzed. A discourse analysis of 200 newspaper articles was conducted to answer the question: how do different parties speak about bio-digestion? Discourse analysis is suitable for making underlying concerns and dilemmas of people more explicit. Thus, one can be more in line with people’s sensitivities in communication and policy, both of which play a crucial role in facilitating transition. The results show that there is little support for bio-digesters in residential areas. The relation between municipalities and residents is poor and asymmetric. The municipalities emphasize their role as experts, thus reinforcing incomprehension. Furthermore, they do not take responsibility and avoid confrontations, contradicting research on the significance of discussions when dealing with innovations (Leeuwis & Aarts, 2011).

Key words: discourse analysis, asymmetry, social acceptance, energy transition
The Corporate Sustainability Performance – Financial Performance Link Revisited

*paper included in Conference Proceedings*

**Author:** E. Dommerholt\(^1\)
\(^1\)International Business School, Hanze University of Applied Sciences, Groningen

**Abstract.** Ever since the mid-1970s a multitude of studies linking corporate sustainability performance (CSP) measures and financial performance measures have been conducted. Until today a plethora of corporate sustainability performance measures have been developed. A universally accepted CSP definition of construct does not (yet) exist. Since we don’t exactly know what CSP entails, CSP measures should (at least) be considered conceptually flawed for that matter. These measures may measure CSP, but it cannot be excluded that other (overarching) phenomena are measured. There are leads suggesting that CSP measures are reflections or representations of corporate culture, suggesting that corporate culture drives FP. If so, managers should not focus on increasing CSP to boost FP, but create a high culture for sustainability. If corporate culture drives financial performance, the investment community can also benefit through improving its decision making processes by including CSP measures that reflect corporate culture.
WORKSHOP 7.3  The business side of health care organisations: realising change
Chair: Hugo Velthuijsen
ROOM: F2.15

SME’s internationalization: The role of organizational capabilities on strategy in the German MedTech industry

*paper included in Conference Proceedings*

Author: G. Heiss
1 The Business School, University of Gloucestershire

Email: gunther.heiss@web.de

Abstract. The aim of this research is to find out which specific factors influence the strategic approach of German MedTech SMEs, how organizational capabilities are related to their strategic approach and what influence they have on the strategy execution in international ventures. Based on theoretical reasoning and on an empirical investigation, a conceptual model of international expansion in this industry leads to understand the behaviour of such SMEs and evaluates important ingredients of success and identifies those that appear to be most prevalent.

Keywords. SME internationalization, healthcare, environmental factors, organizational capabilities, business networks
Using governance to understand how to improve an SME’s success with introducing ehealth applications in Dutch healthcare organisations

*paper included in Conference Proceedings*

Authors: Marike Peterzon and Hugo Velthuijsen
New Business & IT, Hanz University of Applied Sciences

Abstract
The objectives of the Government with regard to ehealth are still in sharp contrast to the present situation regarding the use of ehealth. This has not so much to do with technical possibilities, nor with supposed healthcare organisations’ reluctance to adopt ehealth solutions. Many technically adequate ehealth solutions are available and healthcare managers see the benefits and want to make use of ehealth applications. Still, adoption falls way below stated ambitions. We argue that governance aspects play a role in the limited use of ehealth applications. In a case study, we looked at the adoption of patient portals by hospitals. It shows that on the one hand, many patients are not aware of the benefits of patient portals while at the other hand, these patients would like to make use of these benefits.
The development towards a mature digital organization follows four of phases. The first phase is the Frame phase, in which digital challenges are defined. The second phase is the Focus phase, in which direction is given to the ehealth investments. The next phase is the Engage phase, where the organisation is mobilized. The final phase is the phase of Sustain in which the change is anchored in the organisation. Within the Engage phase, one core bottleneck is that digital transformation is not supported by digital means. In this phase are opportunities for SME’s. The Hanze University of Applied Science can combine its expertise in the field of ICT with knowledge of communication and knowledge game design and user experience to contribute to the effective communication on ehealth applications by researching communication patterns and developing communication means.
Agile as Change Approach in eHealth Innovation Projects

*paper included in Conference Proceedings*

Authors: J. Balje¹, A. Carter² and H. Velthuijsen³
¹ Department of Education and Research, Hanze University of Applied Sciences, Groningen, the Netherlands.
² School of Business Management, Hanze University of Applied Sciences, Groningen, the Netherlands.
³ Professorship New Business & IT, School of Communication, Media and IT, Hanze University of Applied Sciences, Groningen, the Netherlands.

Abstract. Many new eHealth products have been developed, but few reach widespread adoption within healthcare organisations. Literature mentions bottlenecks for the acceptance of new technology in the healthcare industry, such as insufficient attention for change management and reluctant acceptance by intended users. In this paper, we argue that Agile software development is a valid change approach and is applicable in eHealth innovation projects. We compared Scrum with Kotter’s eight step model of change (1995) and verified the theoretical findings with a case study where an innovative eHealth application was developed to support the care for persons with mental disability. We found support for our proposition that Agile practices support an emerging change process as required for the innovative nature of eHealth projects and lead to increased user acceptance. Agile practices especially facilitate co-creation and increase user self-efficacy but they do not automatically create a sense of urgency nor the management support needed to sustain the change.

Keywords. SME’s, eHealth, IT-literacy, Agile, Reflection
WORKSHOP 7.4  **Special Session: Roundtable Entrepreneurial networking: How can your network contribute?**
*Chairs: Frans Donders and Martin Haring*
ROOM: F1.23

**Roundtable discussion - Entrepreneurial networking: How can your network contribute?**

**Content Description**

Every entrepreneur knows that a network is important for success, especially an international network can have great importance for building your company. In this workshop some recent work is presented. The CEO of an international student start-up (Greenclaim) will share his thoughts with us, Frans M. Donders of Hanze University, Theodor van der Velde and Petra Saudi of Saxion University and Zoran Kondali of NSCC International will join us in a panel discussion with the audience.

Within this session we would like to share:

- Research outcomes of a longitudinal research among student start-ups in the Netherlands.
- The development of one of these start-ups over the last five years. How did Greenclaim ([http://www.greenclaim.com/uk/](http://www.greenclaim.com/uk/)) conquer Europe?
- How does a company develop its social network to become an international player?

**Chairs:**

**Name:** Martin Haring  
**Position:** Programme manager entrepreneurship Amsterdam University of applied sciences  
**Organisation:** Amsterdam University of Applied Sciences / Amsterdam Center for Entrepreneurship.

**Name:** Frans M. Donders  
**Position:** Director Groningen Center of Entrepreneurship Value050 & Incubator Cube050  
**Organisation:** Hanze University of Applied Sciences / Groningen Center for Entrepreneurship.

**Relevant articles**

*Article about development social network student entrepreneurs playlist NSCC International youtube*
CLOSING SESSION Including: Best paper award, highlights from the sessions, different perspectives: an interview session and 'until we meet again'.

Chair: Harm van Lieshout
Location: Appel

Closing Session USE2015

At the end of the USE2015 conference we would like to wrap up the conference in a plenary session. This will include the following items:

- Best paper award PhD candidates
- Highlights from the sessions
- Different perspectives: an interview session
- Until we meet again ... Key handover of the USEd keys to the host of the next USE Conference in 2017.

Best paper award PhD Candidates (5 minutes)

We will have a short ceremony announcing the winner of the best paper award and handing over the award. This part will be done by the chairman of the programme committee, dr. Hugo Velthuijsen.

Highlights from the sessions (20 minutes)

We will jointly formulate conclusions and comments from the sessions on a flipover. There will be eight flipovers, presided over by one of the participants:

<table>
<thead>
<tr>
<th>1. Health care organizations as small businesses</th>
<th>Karel-Jan Alsem</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. SMEs &amp; sustainability</td>
<td>Margreet Boersma</td>
</tr>
<tr>
<td>3. Employment, governance &amp; SMEs</td>
<td>Frank-Jan de Graaf</td>
</tr>
<tr>
<td>4. Digital tools</td>
<td>Marc Malenfer</td>
</tr>
<tr>
<td>5. ESENER &amp; SESAME</td>
<td>Monique Ramioul</td>
</tr>
<tr>
<td>6. OSH: sector level</td>
<td>Sisse Grøn</td>
</tr>
<tr>
<td>7. OSH: the firm</td>
<td>Garrett Burnett</td>
</tr>
<tr>
<td>8. OSH: state and individual</td>
<td>Peter Hasle</td>
</tr>
</tbody>
</table>

Different perspectives: an interview session (25 minutes)

Moderators dr. Harm van Lieshout and dr. Hans Joergen Limborg will interview the flipover supervisors, and other participants on conference highlights and lessons learned.

Until we meet again ... (5 min)

Dr. Hugo Velthuijsen will close the USE2015 conference by handing over the keys to the host of USE 2017.
25–27 October 2017

Save the Date
We hope to see you again for USE2017.

Worker Well-being & Sustainable Business Health: From Ideas to Achievable Reality

www.useconference.com