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@InProceedings{REIS2020,
    author="dos Reis, Alexandre Soares
    and Gielen, Elien
    and Wopereis, Ko
    and Pasternak, Marcel
    and Sooäär, Vaido
    and Schneider, Tobias
    and Duarte, Abel J.
    and Malheiro, Benedita
    and Justo, Jorge
    and Ribeiro, Cristina
    and Silva, Manuel F.
    and Ferreira, Paulo
    and Guedes, Pedro",
    editor="Silva, Manuel F.
    and Luís Lima, José
    and Reis, Luís Paulo
    and Sanfeliu, Alberto
    and Tardioli, Danilo",
    title="Smart Companion Pillow -- An EPS@ISEP 2019 Project",
    booktitle="Robot 2019: Fourth Iberian Robotics Conference",
    year="2020",
    publisher="Springer International Publishing",
    address="Cham",
    pages="465--476",
    abstract="This paper describes the design and development of a Smart
Companion Pillow, named bGuard, designed by a multinational and
multidisciplinary team enrolled in the European Project Semester (EPS) at
Instituto Superior de Engenharia do Porto (ISEP) in the spring of 2019.
Nowadays, parents spend most of the day at work and become naturally worried
about the well-being of their young children, specially babies. The aim of
bGuard is to provide a 24-hour remotely accessible baby monitoring service,
contributing to reduce parenting stress. The team, based on the survey of
related products, as well as on marketing, sustainability, ethics and
deontology analyses, developed a remotely interactive Smart Companion Pillow
to monitor the baby's health and room air quality. The collected data, once
it is saved on an Internet of Things (IoT) platform, becomes remotely
accessible. The bGuard pillow, thanks to its shape, reduces the risk of the
baby rolling from back to tummy, lowering the risk of Sudden Infant Death
Syndrome (SIDS).",
    isbn="978-3-030-36150-1"
}

@article{LEE2018,
    title = "Design and Implementation of Monitoring System Architecture for
Smart Bicycle Platform",
    journal = "Procedia Computer Science",
    volume = "134",
    pages = "464 - 469",
    year = "2018",
    note = "The 15th International Conference on Mobile Systems and
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Pervasive Computing (MobiSPC 2018) / The 13th International Conference on
Future Networks and Communications (FNC-2018) / Affiliated Workshops",
    issn = "1877-0509",
    doi = "https://doi.org/10.1016/j.procs.2018.07.182",
    url =
"http://www.sciencedirect.com/science/article/pii/S1877050918311475",
    author = "YeongKyun Lee and Jongpil Jeong",
    keywords = "Remote monitoring, Wireless sensor network, Smart phone
based monitoring, Bicycle monitoring",
    abstract = "This paper proposes the smart phone as a central monitoring
device for the bicycle and the WIFI network as a communication channel
between the smart phone and the sensors. It will show how to implement the
sensor boards with WIFI and relevant firmware, the software on the smart
phone to communicate with the sensor boards and the evaluation results with
the open source software called Goldencheetah. The knowledge in this paper
is not limited to bicycles but can be expanded to any other monitoring
systems using the remote sensors based on smart phone."
}

@article{RANJITH2020,
    title = "Prediction of Exhaust Gas Emission characteristics using Neem
oil blended bio- diesel in diesel engine",
    journal = "Materials Today: Proceedings",
    volume = "21",
    pages = "870 - 875",
    year = "2020",
    note = "International Conference on Recent Trends in Nanomaterials for
Energy, Environmental and Engineering Applications",
    issn = "2214-7853",
    doi = "https://doi.org/10.1016/j.matpr.2019.07.706",
    url =
"http://www.sciencedirect.com/science/article/pii/S2214785319329116",
    author = " Ranjith and V. Velmurugan and S. Thanikaikarasan",
    keywords = "Accelerometer, Diesel engine, Neem oil, Renewable,
Alternative, Viscosity, Volatility",
    abstract = "As a renewable, sustainable and alternative fuel for diesel
engine, biodiesel instead of diesel has been increasingly fuelled to study
its effects on engine performances and emissions. Biodiesel production is a
modern and technological area for researchers due to constant increase in
the prices of petroleum, diesel, and environmental advantages. Increased
environmental awareness and depletion of resources are driving industry to
develop viable alternative fuels from renewable resources that are
environmentally more acceptable. Neem oil is a potential alternative fuel.
The most detrimental properties of neem oils are its high viscosity and low
volatility, and these cause several problems during their long duration
usage in diesel engines. From the review it is found that the use of
biodiesel leads to the substantial reduction in CO2, HC, CO and NOx
emissions."
}

@article{SOBHANI2018,
```

```
    title = "Impact of smartphone distraction on pedestrians crossing
behaviour: An application of head-mounted immersive virtual reality",
    journal = "Transportation Research Part F: Traffic Psychology and
Behaviour",
    volume = "58",
    pages = "228 - 241",
    year = "2018",
    issn = "1369-8478",
    doi = "https://doi.org/10.1016/j.trf.2018.06.020",
    url =
"http://www.sciencedirect.com/science/article/pii/S1369847818300998",
    author = "Anae Sobhani and Bilal Farooq",
    keywords = "Head-mounted immersive virtual reality, Pedestrian,
Distracted street crossing, Multi-tasking, Smartphone use, Surrogate
analysis, Smart LED lights safety treatment",
    abstract = "A novel head-mounted virtual immersive/interactive reality
environment (VIRE) is utilized to evaluate the behaviour of participants in
three pedestrian road crossing conditions while 1) not distracted, 2)
distracted with a smartphone, and 3) distracted with a smartphone with a
virtually implemented safety measure on the road. Forty-two volunteers
participated in our research who completed thirty successful (complete
crossing) trials in blocks of ten trials for each crossing condition. For
the two distracted conditions, pedestrians are engaged in a maze-solving
game on a virtual smartphone, while at the same time checking the traffic
for a safe crossing gap. For the proposed safety measure, smart flashing and
color changing LED lights are simulated on the crosswalk to warn the
distracted pedestrian who initiates crossing. Surrogate safety measures as
well as speed information and distraction attributes such as direction and
orientation of participants head were collected and evaluated by employing a
Multinomial Logit (MNL) model. Results from the model indicate that females
have more dangerous crossing behaviour especially in distracted conditions;
however, the smart LED treatment reduces this negative impact. Moreover, the
number of times and the percentage of duration the head was facing the
smartphone during a trial and a waiting time respectively increase the
possibility of unsafe crossings; though, the proposed treatment reduces the
safety crossing rate. Hence, our study shows that the smart LED light safety
treatment indeed improves the safety of distracted pedestrians and enhances
the successful crossing rate."
}

@article{OBAYASHI2020,
    title = "Pilot and Feasibility Study on Elderly Support Services Using
Communicative Robots and Monitoring Sensors Integrated With Cloud Robotics",
    journal = "Clinical Therapeutics",
    year = "2020",
    issn = "0149-2918",
    doi = "https://doi.org/10.1016/j.clinthera.2020.01.001",
    url =
"http://www.sciencedirect.com/science/article/pii/S0149291820300278",
    author = "Kazuko Obayashi and Shigeru Masuyama",
    keywords = "activities of daily living, cloud robotics, communicative
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robot, elderly care, robotics utilization, support services",
    abstract = "Purpose
    This pilot before-after study investigated the possible effects of
communicative robots, used with a sensing system supported by cloud
robotics, in caring for elderly people.
    Methods
    Two elderly women in nursing homes and 4 care workers participated in
the trial. The overnight life rhythm assessments of the study participants
and care workers were surveyed to determine when and how the robots should
be integrated into care. The system consisted of the robot Sota, a
noncontact vital sensor and a sheet-shaped bed sensor. Real-time sensing
data and conversations between the participants and robots were sent to the
servers, prompting a quick verbal response by the robot supported by cloud
robotics.
    Findings
    Care workers devoted 3 h to the maintenance of records during their most
stressful periods. Automatic recording of vital information using robot
sensors can improve the quality of nursing care work. Care workers' stress
levels were maximized when responding to nurse calls. Temporary responses to
nurse calls by the robots may help to effectively reduce the burden on
nursing care workers. Robots can stimulate elderly people to communicate
more with others (P < 0.05). Appropriate vocalization by communicative
robots may prevent the deterioration of quality of life in elderly
individuals.
    Implications
    Communicative robots, used with a sensing system, may stimulate elderly
people to activate a communication link with others and help care workers to
effectively reduce the burden during the night shift. A follow-up study
involving a broader research program on communicative robots and elderly
care would be beneficial."
}

@article{THAPA2019,
    title = "Study on the wintry thermal improvement of makeshift shelters
built after Nepal earthquake 2015",
    journal = "Energy and Buildings",
    volume = "199",
    pages = "62 - 71",
    year = "2019",
    issn = "0378-7788",
    doi = "https://doi.org/10.1016/j.enbuild.2019.06.031",
    url =
"http://www.sciencedirect.com/science/article/pii/S0378778819306309",
    author = "Rita Thapa and Hom Bahadur Rijal and Masanori Shukuya and
Hikaru Imagawa",
    keywords = "Nepal, Earthquake, Temporary shelters, Indoor air
temperature, Thermal insulation, Thermal improvement",
    abstract = "After massive earthquake 2015, thousands of Nepalese who
lost their permanent houses by the hardest hits were forced to live in
makeshift temporary shelters. The field measurement on indoor thermal
environment in five shelters was conducted in one of the district hit by the
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earthquake, Lalitpur, in winter. The mean indoor and outdoor air
temperatures during the measured nighttime were found to be 10.3 °C and 7.6
°C, respectively, and the nocturnal indoor air temperature remained below
the lowest acceptable temperature of 11 °C. This result assured that these
shelters are not good for winter and must create various problems. We
therefore analyzed the thermal characteristics of those shelters based on
the measured results in order to seek a possible improvement. The total heat
loss coefficient estimated per floor area in five shelters ranged from 11.3
to 15.2 W/(m2·K); that is thermal insulation was very low. We made a simple
numerical analysis on the variation of indoor air temperature with the
assumption of improved thermal characteristics and thereby found that it
needs to be reduced about 2~7 W/(m2·K) to have the indoor air temperature
higher than 11 °C for 70\% of the whole nocturnal hours. Such reduction of
heat loss was found to be realized by adding affordable materials, e.g.,
cellular polyethylene foam and clothes for respective walls and roof. Thus,
the knowledge obtained from this study should hopefully be applied to actual
improvement of indoor thermal environment in existing shelters and also to a
development for the preparation against future disaster."
}

@MISC{gartner2021,
  author  = "{Gartner}",
  title   = "{Gartner Magic Quadrant for Data Science and Machine Learning
Platforms}",
  url     = "{https://www.gartner.com/en/documents/3998753}",
  urldate = "{March 2021}",
  year    = "{2021}",
  address = "{[Accessed in April 2021]}",
}

@MISC{android41,
  author  = "{Android Open Source Project}",
  title   = "{Android Developers: Android 4.1 APIs}. January 2015. [Accessed
in April, 2017]",
  url     =
"{http://developer.android.com/about/versions/android-4.1.html}",
  urldate = "{May 2014}",
  year    = "{2014}",
  address = "{[Accessed in April 2017]}",
}

@MISC{cloudexpo2008,
  AUTHOR  = "{Cloud Expo}",
  title   = "{Twenty-One Experts Define Cloud Computing}",
  url     = "{http://cloudcomputing.sys-con.com/node/612375}",
  urldate = "{October 2013}",
  year    = "{2008}",
  address = "{[Accessed in April 2021]}",
}

@MISC{Ahuerma2019,
```

```
  AUTHOR  = "{Ahuerma et al.}",
  title   = "{Socio–Ecosystemic Sustainability}",
  url     =
"{https://www.researchgate.net/publication/333839433_Socio-Ecosystemic_Susta
inability}",
  urldate = "{June 2019}",
  year    = "{2019}",
  address = "{[Accessed in April 2023]}",
}



@BOOK{bandyopadhyay2013unsupervised,
  title={Unsupervised Classification: Similarity Measures, Classical and
Metaheuristic Approaches, and Applications},
  author={Bandyopadhyay, Sanghamitra and Saha, Sriparna},
  year={2013},
  isbn={978-3-642-32450-5},
  publisher={Springer},
  address = {Berlin, Germany},
  doi = {10.1007/978-3-642-32451-2}
}

@ARTICLE{llorente2009virtual,
  author  ="{Sotomayor, B. and Montero, Ruben S. and Llorente, I.M. and
Foster, I.}",
  journal ="Internet Computing, IEEE",
  title   ="{Virtual Infrastructure Management in Private and Hybrid
Clouds}",
  year    ="{2009}",
  month   ="{Sept}",
  volume  ="{13}",
  number  ="{5}",
  pages   ="{14-22}",
  abstract = {One of the many definitions of "cloud" is that of an
infrastructure-as-a-service (IaaS) system, in which IT infrastructure is
deployed in a provider's data center as virtual machines. With IaaS clouds'
growing popularity, tools and technologies are emerging that can transform
an organization's existing infrastructure into a private or hybrid cloud.
OpenNebula is an open source, virtual infrastructure manager that deploys
virtualized services on both a local pool of resources and external IaaS
clouds. Haizea, a resource lease manager, can act as a scheduling back end
for OpenNebula, providing features not found in other cloud software or
virtualization-based data center management software.},
  doi = {10.1109/MIC.2009.119}
}

@article{Mulder2013428,
    title = "Development of a Motion System for an Advanced Sailing
Simulator",
    journal = "Procedia Engineering ",
```

```
    volume = "60",
    number = "0",
    pages = "428 - 434",
    year = "2013",
    note = "6th Asia-Pacific Congress on Sports Technology (APCST) ",
    issn = "1877-7058",
    doi = "http://dx.doi.org/10.1016/j.proeng.2013.07.030",
    url =
"http://www.sciencedirect.com/science/article/pii/S1877705813010813",
    author = "Fabian A. Mulder and Jouke C. Verlinden",
    keywords = "Sailing",
    keywords = "Dinghy",
    keywords = "Virtual reality",
    keywords = "Training simulation",
    keywords = "Force feedback",
    abstract = "Abstract To train competitive sailing in a virtual setting,
motion of the boat as well as haptic feedback of the sail lines is
essential. When discussing virtual environments (VEs) the concept of
presence is often used. In this study we develop a sailing simulator motion
system to research what factors contribute to the participants' sensation of
presence when sailing in a VE. The developed simulator includes the
development of a mainsheet force feedback system and a novel motion
platform, connected to a high-quality graphics sailing simulation. In future
research, the developed system will be used to study which sail training
type can be performed in simulated environments, and if the system can be
used as a valid testbed for perception-action experiments."
}

@MISC{Cambridge2023,
  author  = "{Cambridge University Press}",
  title   = "{Cambridge dictionary}",
  url     =
"{https://dictionary.cambridge.org/dictionary/english/shopping-cart}",
  urldate = "{March 2022}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
}

@MISC{JLP2023,
  author  = {Jaworski et al.},
  title   = "{Definitions of marketing}",
  url     =
"{https://www.ama.org/the-definition-of-marketing-what-is-marketing/}",
  urldate = "{March 2022}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
}

@INPROCEEDINGS{kumar2017,
  author={Kumar et al.},
  booktitle={2017 International conference on Microelectronic Devices,
```

```
Circuits and Systems (ICMDCS)},
  title={Smart Shopping Cart},
  year={2017},
  volume={},
  number={},
  pages={1-4},
  doi={10.1109/ICMDCS.2017.8211723}}

@ARTICLE{Wang2016,
  author={Wang, You-Chiun & Yang, Chang-Chen},
  journal={IEEE Sensors Journal},
  title={3S-cart: A Lightweight, Interactive Sensor-Based Cart for Smart
Shopping in Supermarkets},
  year={2016},
  volume={16},
  number={17},
  pages={6774-6781},
  doi={10.1109/JSEN.2016.2586101}
}

@INPROCEEDINGS{Mekruksavanich2020,
  author={Mekruksavanich, Sakorn},
  booktitle={2020 Joint International Conference on Digital Arts, Media and
Technology with ECTI Northern Section Conference on Electrical, Electronics,
Computer and Telecommunications Engineering (ECTI DAMT & NCON)},
  title={Supermarket Shopping System using RFID as the IoT Application},
  year={2020},
  volume={},
  number={},
  pages={83-86},
  doi={10.1109/ECTIDAMTNCON48261.2020.9090714}
}

@INPROCEEDINGS{Mekruksavanich2019,
  author={Mekruksavanich, Sakorn},
  booktitle={2019 IEEE 10th International Conference on Software Engineering
and Service Science (ICSESS)},
  title={The Smart Shopping Basket Based on IoT Applications},
  year={2019},
  volume={},
  number={},
  pages={714-717},
  doi={10.1109/ICSESS47205.2019.9040750}
}

@INPROCEEDINGS{Khairnar2017,
  author={Khairnar, Prasiddhi K. & Gawali, Dhanashri H.},
  booktitle={2017 2nd IEEE International Conference on Recent Trends in
Electronics, Information & Communication Technology (RTEICT)},
  title={Innovative shopping cart for smart cities},
  year={2017},
```

```
  volume={},
  number={},
  pages={1067-1071},
  doi={10.1109/RTEICT.2017.8256762}
}

@article{Faisal,
title={Smart Cart With Multi-shopping Solutions},
volume={15},
url={https://online-journals.org/index.php/i-jim/article/view/26397},
DOI={10.3991/ijim.v15i24.26397},
abstract={Consumerism has constantly been growing, and visiting marketplaces
and purchasing is a key development factor for the economic development of a
city. The spending habits of people are a reflector of many development
indices. As people go out for purchasing in malls for shopping essential
items, they often tend to find long queues at the billing counter, and the
queues are more longer during weekends and during sale seasons. This has
been deterring people from going out shopping and instead resort to online
shopping. This has affected the sales and revenue of departmental chains.
Also, people spend quite a considerable amount of time searching through
rows in order to find the items of their choice. Proposing a solution to
these above-mentioned problems using technology is a real boon.  Installing
a payment option on the cart itself would result in cutting down the waiting
times in queues. Moreover, the customers can also benefit from navigation
through the virtual maps that would be displayed on the screens of the
carts. This reduces the time wasted by customers in searching for products.
Hence the customers are self-dependent during their shopping. For the retail
group, their transactions and management are truly simplified with these
developments. Additionally, the counter labor will decrease if not cease to
zero, which in turn reduces the labor cost drastically. In times of pandemic
like now, people have been sticking with online shopping due to various
reasons, but they long to go out and spend time in the malls as they would
in normal times. The proposed solution would definitely assist in the
normalization of lives and bring back on-ground retail back to life.},
number={24},
journal={International Journal of Interactive Mobile Technologies (iJIM)},
author={Faisal et al.},
year={2021},
month={Dec.},
pages={pp. 77–93}
}

@INPROCEEDINGS{Zhang,
  author={Zhang et al.},
  booktitle={2022 3rd International Conference on Big Data, Artificial
Intelligence and Internet of Things Engineering (ICBAIE)},
  title={Design and Research of Intelligent Shared Shopping Cart Based on
Internet+},
  year={2022},
  volume={},
  number={},
```

```
  pages={246-249},
  doi={10.1109/ICBAIE56435.2022.9985795}
}

@article{Mohanapriya,
author = {Mohanapriya et al.},
year = {2018},
month = {01},
pages = {778-785},
title = {Design and Implementation of Smart Basket Cart Using Near Field
Communication}
}

@INPROCEEDINGS{Arciuolo,
  author={Arciuolo, Thomas & Abuzneid, Abdel-shakour},
  booktitle={2019 International Conference on Computational Science and
Computational Intelligence (CSCI)},
  title={Simultaneously Shop, Bag, and Checkout (2SBC-Cart): A Smart Cart
for Expedited Supermarket Shopping},
  year={2019},
  volume={},
  number={},
  pages={1162-1167},
  doi={10.1109/CSCI49370.2019.00219}}

@MISC{grocerystatistics,
  author  = {Emily Rodgers},
  title   = "{Grocery Store Statistics: Where, When, & How Much People
Grocery Shop}",
  url     =
"{https://www.driveresearch.com/market-research-company-blog/grocery-store-s
tatistics-where-when-how-much-people-grocery-shop/}",
  urldate = "{February 2023}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
}

@MISC{AHapp,
  author  = "{SiteSpect Advanced Event Tracking}",
  title   = "{de Albert Heijn app}",
  url     = "{https://www.ah.nl/over-ah/app}",
  urldate = "{March 2023}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
}

@MISC{RiceLake,
  author  = "{RiceLake}",
  title   = "{How Do Scales Work?}",
  url     =
"{https://www.ricelake.com/resources/articles/how-do-scales-work/}",
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```
  urldate = "{March 2023}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
}

@MISC{Geeks2023,
  author  = "{GeeksforGeeks}",
  title   = "{Classification of Smart objects}",
  url     = "{https://www.geeksforgeeks.org/classification-of-smart-
objects/}",
  urldate = "{March 2022}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
}

@MISC{Amazon2022,
  author  = "{US Amazon}",
  title   = "{The next evolution of the Dash Cart: New features and
expansion to first Whole Foods Market Store}",
  url     =
"{http://www.aboutamazon.com/news/retail/amazon-dash-cart-new-features-whole
-foods}",
  urldate = "{July 2022}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
}

@MISC{Caper2022,
  author  = "{Caper}",
  title   = "{AI-powered Smart Carts & Checkout Systems}",
  url     = "{https://www.caper.ai/}",
  urldate = "{2022}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
}

@MISC{LaptrinhX2019,
  author  = "{LaptrinhX}",
  title   = "{Meet Caper, the AI self-checkout shopping cart}",
  url     =
"{https://laptrinhx.com/meet-caper-the-ai-self-checkout-shopping-cart-166824
5467/}",
  urldate = "{January 2019}",
  year    = "{2019}",
  address = "{[Accessed in March 2023]}",
}

@MISC{Veeve2023,
  author  = "{Veeve}",
  title   = "{CONTACTLESS SHOPPING}",
  url     = "{https://veeve.io/#aisleaware}",
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```
  urldate = "{2023}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
}

@MISC{Geek2022,
  author  = "{GeekWire}",
  title   = "{Seattle smart shopping cart startup Veeve, led by ex-Amazon
engineers, rolling into Albertsons}",
  url     =
"{https://www.geekwire.com/2022/seattle-smart-shopping-cart-startup-veeve-le
d-by-ex-amazon-engineers-rolling-into-albertsons/}",
  urldate = "{May 2022}",
  year    = "{2022}",
  address = "{[Accessed in March 2023]}",
}

@MISC{TRACXPOINT2023,
  author  = "{TRACXPOINT}",
  title   = "{Artificial Intelligence Shopping Cart}",
  url     = "{https://tracxpoint.com/}",
  urldate = "{2023}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
}

@incollection{Eastman2015,
  title={Brief history of barcode scanning},
  author={Eastman, Jay},
  booktitle={OSA Century of Optics},
  pages={128--133},
  year={2015},
  publisher={Optical Society}
}

@article{Eenbergen2019,
  author  = {Coen van Eenbergen},
  title   = {Decathlon uses Mulesoft to achieve retail innovation},
  year    = 2019,
  number  = 1,
  month   = 11,
  note    = {Decathlon, Integration, mulesoft},
}

@article{Moran2022,
  author  = {Catherine Douglas Moran & Sam Silverstein},
  title   = {As self-checkout expands in grocery, here are 4 ways the
technology is leveling up},
  journal = {GROCERY DIVE},
  year    = 2022,
  number  = 1,
```

```
  month   = 3,
  note    = {From age verification to produce-recognition systems, retailers
have new ways to make an old concept faster, more secure and easier to
use.},
}

@MISC{MindMapping2018,
  author  = "{MindMapping.com}",
  title   = "{What is a Mind Map?}",
  url     = "{https://www.mindmapping.com/mind-map}",
  urldate = "{2018}",
  year    = "{2018}",
  address = "{[Accessed in March 2023]}",
}

@MISC{WhatIs2017,
  author  = "{WhatIs.com}",
  title   = "{What is brainstorming?: Definition from TechTarget}",
  url     = "{https://www.techtarget.com/whatis/definition/brainstorming}",
  urldate = "{June 28, 2017}",
  year    = "{2017}",
  address = "{[Accessed in March 2023]}",
}

@MISC{ethicsintro1,
  author  = "{Tutorialspoint}",
  title   = "{Engineering Ethics - Introduction}",
  url     =
"{https://www.tutorialspoint.com/engineering_ethics/engineering_ethics_intro
duction.htm#}",
  urldate = "{February 7, 2022}",
  year    = "{2022}",
  address = "{[Accessed in March 2023]}",
}

@MISC{ethicsintro2,
  author  = "{Ohio University}",
  title   = "{Ultimate Guide to Engineering Ethics}",
  url     = "{https://www.techtarget.com/whatis/definition/brainstorming}",
  urldate = "{February 7, 2020}",
  year    = "{2020}",
  address = "{[Accessed in March 2023]}",
}

@MISC{ethicsrules,
  author  = "{National Society of Professional Engineers}",
  title   = "{NSPE Code of Ethics for Engineers}",
  url     = "{https://www.nspe.org/resources/ethics/code-ethics}",
  urldate = "{July 2019}",
  year    = "{2019}",
  address = "{[Accessed in March 2023]}",
```

```
}

@MISC{deontology,
  author  = "{The Ethics Centre}",
  title   = "{Ethics Explainer: Deontology}",
  url     = "{https://ethics.org.au/ethics-explainer-
deontology/#:~:text=Deontology%20is%20an%20ethical%20theory,don't%20aren't.}
",
  urldate = "{February, 18 2016}",
  year    = "{2016}",
  address = "{[Accessed in March 2023]}",
}

@article{Kunhoth2020,
  author  = {Kunhoth et al.},
  title   = {Indoor positioning and wayfinding systems: a survey.},
  journal = {Human-centric Computing and Information Sciences},
  year    = 2020,
  volume={10},
  number={1},
  pages={1--41},
  keywords    = {Visible lights, Indoor navigation, Indoor positioning,
Computer vision, PDR, RF signals},
  url = {https://doi.org/10.1186/s13673-020-00222-0},
}

@MISC{OBERLO2020,
  author  = "{OBERLO}",
  title   = "{What Is Benchmarking? Definition, Examples and Meaning -
Oberlo Wiki}",
  url     = "{https://www.oberlo.com/ecommerce-wiki/benchmarking}",
  urldate = "{2020}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
}

@MISC{Forbes2022,
  author  = "{Forbes}",
  title   = "{Welcome To Your New Shopping Cart Experience}",
  url     =
"{https://www.forbes.com/sites/jenniferhicks/2022/09/16/welcome-to-your-new-
shopping-cart-experience/?sh=5629652c1379}",
  urldate = "{September 19, 2022}",
  year    = "{2022}",
  address = "{[Accessed in March 2023]}",
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@MISC{ESM2023,
  author  = "{ESM Magazine}",
  title   = "{3 Tech Innovations Changing The Grocery Retail Shopping
Experience}",
```

```
  url     =
"{https://www.esmmagazine.com/retail/esm-examines-three-new-retail-technolog
y-innovations-233023}",
  urldate = "{February 22, 2023}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
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@MISC{PYMNTS2022,
  author  = "{PYMNTS}",
  title   = "{AI-Powered Autonomous Stores Usher in Next-Gen Retail for
European Shoppers}",
  url     =
"{https://www.pymnts.com/artificial-intelligence-2/2022/ai-powered-autonomou
s-stores-usher-in-next-gen-retail-for-european-shoppers/}",
  urldate = "{August 02, 2022}",
  year    = "{2022}",
  address = "{[Accessed in March 2023]}",
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@techreport{MCKINSEY2022,
  author="Steven Begley et al.",
  title="The State of Grocery Retail 2022-Europe",
  institution = "McKinsey & Company",
  year        = "2022",
  type        = "Annual report",
  month       = "March",
}

@MISC{ARUMUGAM2012,
  author  = "{Manickavel Arumugam}",
  title   = "{Probability and Impact Matrix}",
  url     =
"{https://www.justgetpmp.com/2012/02/probability-and-impact-matrix.html}",
  urldate = "{February 14, 2012}",
  year    = "{2012}",
  address = "{[Accessed in March 2023]}",
}
@MISC{NIELSEN2021,
  author  = "{Nielsen}",
  title   = "{What do european shoppers really want}",
  url     = "{https://www.nielsen.com/insights/2021/insights/}",
  urldate = "{2021}",
  year    = "{2021}",
  address = "{[Accessed in March 2023]}",
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@techreport{TESCO2022,
  author="Robert Welch et al.",
  title="Tesco PLC Annual Report and Financial Statements 2022",
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```
  type        = "Annual report",
  month       = "May",
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@MISC{YOUGOV2023,
  author  = "{YouGov}",
  title   = "{How Brits feel about the groceries sector}",
  url     =
"{https://yougov.co.uk/topics/consumer/trackers/how-brits-feel-about-the-gro
ceries-sector}",
  urldate = "{2023}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
}
@MISC{FoodIndustry2020,
  author  = "{Food Industry Executive}",
  title   = "{Grocery Shopping Habits of Gen Z and Millennials}",
  url     =
"{https://foodindustryexecutive.com/2020/02/grocery-shopping-habits-of-gen-z
-and-millennials/}",
  urldate = "{February 06, 2020}",
  year    = "{2020}",
  address = "{[Accessed in March 2023]}",
}
@MISC{InsiderIntelligence2018,
  author  = "{Insider Intelligence}",
  title   = "{Grocery Apps Grow in Importance}",
  url     =
"{https://www.insiderintelligence.com/content/grocery-apps-grow-in-importanc
e}",
  urldate = "{July 02, 2018}",
  year    = "{2018}",
  address = "{[Accessed in March 2023]}",
}

@MISC{Siteware2023,
  author  = "{Siteware}",
  title   = "{Business Model Canvas: What is it and how do you create it for
your business}",
  url     = "{https://www.siteware.co/methodologies/business-model-
canvas/}",
  urldate = "{February 06, 2023}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
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@MISC{pestleintro,
  author  = "{CIPD}",
  title   = "{PESTLE Analysis: Factsheets}",
  url     =
"{https://www.cipd.co.uk/knowledge/strategy/organisational-development/pestl
e-analysis-factsheet#gref}",
  urldate = "{December 06, 2021}",
```

```
  year    = "{2021}",
  address = "{[Accessed in March 2023]}",
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@MISC{pestle,
  author  = "{Dataintelo}",
  title   = "{Global Smart Shopping Carts Market by Type (Up to 100L,
100-200L, More than 200L), By Application (Supermarket, Shopping Malls,
Others) And By Region (North America, Latin America, Europe, Asia Pacific
and Middle East & Africa), Forecast From 2022 To 2030}",
  url     =
"{https://dataintelo.com/report/global-smart-shopping-carts-market/}",
  urldate = "{December 20, 2022}",
  year    = "{2022}",
  address = "{[Accessed in March 2023]}",
}

@MISC{RETAILERS2022,
  author  = "{Retailers in Europe -- European Retail Rankings}",
  title   = "{Your access to all major retailers in Europe}",
  url     = "{https://www.retail-index.com/?gclid=Cj0KCQjww4-
hBhCtARIsAC9gR3ZIgIwkp754Ohgou2miwL8auHF4GvX0dIP12LdRwHcFQ4ULqLNg0ecaAp8zEAL
w_wcB}",
  urldate = "{September, 2022}",
  year    = "{2022}",
  address = "{[Accessed in March 2023]}",
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@MISC{BUSINESS2022,
  author  = "{Business.org}",
  title   = "{What is the 4P Marketing Matrix?}",
  url     =
"{https://www.business.org/marketing/sales/marketing-101-4p-matrix/}",
  urldate = "{October 12, 2022}",
  year    = "{2022}",
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@MISC{mercadona,
  author  = "{Mercadona}",
  title   = "{Mercadona}",
  url     = "{https://www.mercadona.pt/pt/iniciacao}",
  urldate = "{March 2023}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",

  @MISC{lidl,
  author  = "{LIDL}",
  title   = "{Lidl Plus. a app Lidl para poupar ainda mais}",
  url     = "{https://www.lidl.pt/lidl-plus}",
  urldate = "{March 2023}",
  year    = "{2023}",
  address = "{[Accessed in March 2023]}",
```

```
@MISC{AGDIWO2022,
  author  = "{Agdiwo}",
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(SCRUM)}",
  url     =
"{https://www.business.org/marketing/sales/marketing-101-4p-matrix/}",
  urldate = "{November 30, 2022}",
  year    = "{2022}",
  address = "{[Accessed in March 2023]}",
}

@MISC{HUGHES2022,
  author  = "{Hughes Media}",
  title   = "{How To Achieve SMART Marketing Goals For Your Business}",
  url     =
"{https://www.hughesmedia.us/start-smart-in-2020-how-to-set-and-achieve-smar
t-marketing-goals-for-your-business/}",
  urldate = "{December 16, 2022}",
  year    = "{2022}",
  address = "{[Accessed in March 2023]}",
}

@MISC{MBA2022,
  author  = "{MBA Skool}",
  title   = "{Marketing Programs - Meaning & Definition}",
  url     =
"{https://www.mbaskool.com/business-concepts/marketing-and-strategy-terms/10
996-marketing-
programs.html#:~:text=A%20marketing%20program%20is%20a,programs%20according%
20to%20the%20situation.}",
  urldate = "{December , 2022}",
  year    = "{2022}",
  address = "{[Accessed in March 2023]}",
}

@MISC{ethicssales,
  author  = "{Prachi Juneja}",
  title   = "{Ethics in Sales and Marketing}",
  url     =
"{https://www.managementstudyguide.com/ethics-in-sales-marketing.htm}",
  year    = "{2022}",
  address = "{[Accessed in March 2023]}",
}
@article{marketingethics,
    title = "Ethics in Sales and Marketing: Key Advantages",
    journal = "Marketing Mastermind",
    volume = "17",
    pages = "53-58",
    year = "2020",
    url = "https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3764324",
```

```
    author = "Pankaj M. Madhani",
    keywords = "Sales, Marketing, Ethics, Unethical practices, Customer
satisfaction, Competitive advantage",
    abstract = "Sales and marketing ethics systematically examines marketing
variables related to 4Ps of marketing (or marketing mix) - issues such as
unsafe products, deceptive pricing, discrimination in distribution and
deceptive advertising. Unethical sales and marketing activity causes various
problems for organizations such as lack of customer trust, spoiled customer
relationships, declined customer retention, and reduced sales. Organizations
that maintain relationships with customers on the premises of trust, ethics,
and integrity will have a competitive advantage over those that do not.
Ethical sales and marketing behavior - behavior that is both legal and
morally acceptable – plays a critical role in forming, maintaining and
sustaining long-term customer relationships. Ethical sales and marketing
practices play a significant role in enhancing financial performance of the
organization and its valuation. Sales and marketing ethics strengthen long-
term viability of the organizations and build competitive advantages."
}
@MISC{lamarco,
  author  = "{Nicole LaMarco}",
  title   = "{What Is the Difference Between Unethical & Ethical
Advertising?}",
  url     =
"{https://smallbusiness.chron.com/difference-between-unethical-ethical-adver
tising-19262.html}",
  urldate = "{08 November, 2018}",
  year    = "{2018}",
  address = "{[Accessed in March 2023]}",
}
@article{EU2019,
title = "EU Machinery Legislation",
author = "European Commission",
url =
"https://ec.europa.eu/growth/sectors/mechanical-engineering/machinery/",
year    = "{2019}",
address = "{[Accessed in April 2023]}"
}

@article{EU20141,
title = "Electromagnetic Compatibility (EMC) Directive",
author = "European Commission",
url =
"https://ec.europa.eu/growth/sectors/electrical-engineering/emc-directive/",
year    = "{2014}",
address = "{[Accessed in April 2023]}"
}

@article{EU20142,
title = "The Low Voltage Directive (LVD)",
author = "European Commission",
url =
```

```
"https://ec.europa.eu/growth/sectors/electrical-engineering/lvd-directive/",
year    = "{2014}",
address = "{[Accessed in April 2023]}"
}

@article{EU20143,
title = "{Radio Equipment Directive (RED)}",
author = "{European Commission}",
url =
"{https://ec.europa.eu/growth/sectors/electrical-engineering/red-directive_e
n}",
year    = "{2014}",
address = "{[Accessed in April 2023]}"
}

@article{EU2011,
  author = "{European Commission}",
  title   = "{ROHS Directive}",
  url     =
"{https://ec.europa.eu/environment/topics/waste-and-recycling/rohs-directive
_en}",
  year    = "{2011}",
  address = "{[Accessed in April 2023]}"
}
@InCollection{ethicsenviron,
    author       =    {Brennan, Andrew & Lo, Norva Y. S.},
    title        =    {{Environmental Ethics}},
    booktitle    =    {The {Stanford} Encyclopedia of Philosophy},
    editor       =    {Edward N. Zalta},
    url =
{https://plato.stanford.edu/archives/sum2022/entries/ethics-environmental/},
    year         =    {2022},
    edition      =    {Summer 2022},
    publisher    =    {Metaphysics Research Lab, Stanford University}
}
@MISC{ethicsenviron2,
  author  = "{Conserve Energy Future}",
  title   = "{What are Environmental Ethics? Types and Principles}",
  url     =
"{https://www.conserve-energy-future.com/environmental-ethics.php}",
  urldate = "{2023}",
  year    = "{2023}",
  address = "{[Accessed in April 2023]}",
}

@MISC{KANBANIZE2021,
  author  = "{Kanban Software for Agile Project Management}",
  title   = "{What is Plan-Do-Check-Act (PDCA) Cycle?: Kanbanize}",
  url     =
"{https://kanbanize.com/lean-management/improvement/what-is-pdca-cycle}",
  urldate = "{2021}",
```

```
  year    = "{2021}",
  address = "{[Accessed in April 2023]}",
}
@MISC{social1,
  author  = "{ADEC Innovations}",
  title   = "{What is social sustainability?}",
  url     =
"{https://www.adecesg.com/resources/faq/what-is-social-sustainability/}",
  urldate = "{2023}",
  year    = "{2023}",
  address = "{[Accessed in April 2023]}",
}
@MISC{social2,
  author  = "{Schneider Electric}",
  title   = "{Social sustainability issues: a comprehensive insight}",
  url     =
"{https://www.se.com/ww/en/work/campaign/articles/social-sustainability-issu
es-a-comprehensive-insight.jsp}",
  urldate = "{2023}",
  year    = "{2023}",
  address = "{[Accessed in April 2023]}",
}
@MISC{lca,
  author  = "{British Plastics Federation}",
  title   = "{Life Cycle Analysis (LCA) - A Complete Guide to LCAs}",
  url     =
"{https://www.bpf.co.uk/sustainable_manufacturing/life-cycle-analysis-lca.as
px}",
  urldate = "{2023}",
  year    = "{2023}",
  address = "{[Accessed in April 2023]}",
}

@ARTICLE{Barney_Holak_2023,
  title={stakeholder},
  url={https://www.techtarget.com/searchcio/definition/stakeholder},
  journal={TechTarget},
  author={Barney, Nick and Holak, Brian},
  year={2023},
  month={Jan},
}

@MISC{Mind_Tools_Content_Team_2023,
  title={MindTools},
  url={https://www.mindtools.com/at2o1co/what-is-stakeholder-management},
  journal={Home},
  author={Mind Tools Content Team},
  year={2023},
  month={Jan} }

@MISC{SCRUM2022,
```

```
  author  = "{Revista Escuela de Negocios y Dirección}",
  title   = "{¿Qué es Scrum? Conoce el Framework que agiliza el Trabajo en
Equipo}",
  url     =
"{https://www.escueladenegociosydireccion.com/revista/business/scrum-framewo
rk-agiliza-trabajo-equipo/}",
  urldate = "{October 18, 2022}",
  year    = "{2022}",
  address = "{[Accessed in April 2023]}",
}

@MISC{PROJECT2023,
  author  = "{Institute of Project Management}",
  title   = "{Stakeholder Analysis Process}",
  url     =
"{https://www.projectmanagement.ie/blog/stakeholder-analysis-process/}",
  urldate = "{February 09, 2023}",
  year    = "{2023}",
  address = "{[Accessed in April 2023]}",
}
@MISC{insulation,
  author  = "{GRIT}",
  title   = "{Foam types for thermal insulation}",
  url     = "{https://gasesgrit.com/en/foam-types-for-thermal-insulation/}",
  urldate = "{June 10, 2022}",
  year    = "{2022}",
  address = "{[Accessed in April 2023]}",
}

@MISC{indiamart2022,
  author  = "{indiamart.com}",
  title   = "{Automatic Usb Laser Barcode Scanne}",
  url     =
"{https://www.indiamart.com/proddetail/automatic-usb-laser-barcode-scanner-1
4011693697.html}",
  urldate = "{June 10, 2022}",
  year    = "{2022}",
  address = "{[Accessed in April 2023]}",
}
@MISC{iFixit2023,
  author  = "{iFixit}",
  title   = "{Good Vibrations: How Apple Dominates the Touch Feedback Game:
iFixit News}",
  url     =
"{https://es.ifixit.com/News/16768/apple-taptic-engine-haptic-feedback}",
  urldate = "{January, 2023}",
  year    = "{2023}",
  address = "{[Accessed in April 2023]}",
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@MISC{Katie2021,
```

```
  author  = "{Katie Terrell Hanna}",
  title   = "{What Is a 2D barcode and How Does It Work?}",
  url     =
"{http://searchmobilecomputing.techtarget.com/definition/2D-barcode}",
  urldate = "{December, 2021}",
  year    = "{2021}",
  address = "{[Accessed in April 2023]}",
}
@MISC{Syndey2020,
  author  = "{Syndey}",
  title   = "{Haptic Feedback in Everyday Life}",
  url     =
"{https://codechangers.com/blog/haptic-feedback-in-everyday-life/}",
  urldate = "{September 28, 2020}",
  year    = "{2023}",
  address = "{[Accessed in April 2023]}",
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@MISC{Nationwide2011,
  author  = "{Nationwide Barcode}",
  title   = "{1D Barcode Formats}",
  url     = "{https://nationwidebarcode.com/1d-barcode-format/}",
  urldate = "{December 17, 2011}",
  year    = "{2011}",
  address = "{[Accessed in April 2023]}",
}
@MISC{Eenbergen2019,
  author  = "{Coen van Eenbergen}",
  title   = "{Decathlon uses Mulesoft to achieve retail innovation}",
  url     =
"{https://www.techzine.eu/blogs/applications/43864/decathlon-uses-mulesoft-t
o-achieve-retail-innovation/}",
  urldate = "{December 12, 2019}",
  year    = "{2019}",
  address = "{[Accessed in April 2023]}",
}
@MISC{Magloff2020,
  author  = "{Lisa Magloff}",
  title   = "{An automated checkout system for smaller shops}",
  url     =
"{https://www.springwise.com/innovation/retail/caper-self-checkout-counter-s
ize/}",
  urldate = "{October 26, 2020}",
  year    = "{2020}",
  address = "{[Accessed in April 2023]}",
}
@MISC{Smartsheet2021,
  author  = "{Smartsheet}",
  title   = "{How Voice Assistants Are Changing Our Lives}",
  url     =
"{https://www.smartsheet.com/voice-assistants-artificial-intelligence}",
  urldate = "{October , 2021}",
```

```
  year    = "{2021}",
  address = "{[Accessed in April 2023]}",
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@MISC{Microsoft2022,
  author  = "{Voice assistants overview - Speech service - Azure Cognitive
Services | Microsoft Learn}",
  title   = "{Voice assistants overview - Speech service - Azure Cognitive
Services}",
  url     =
"{https://learn.microsoft.com/en-us/azure/cognitive-services/speech-service/
voice-assistants}",
  urldate = "{June , 2022}",
  year    = "{2022}",
  address = "{[Accessed in April 2023]}",
}
@MISC{wirelesscharg,
  author  = "{Wireless Charging}",
  title   = "{How Voice Assistants Are Changing Our Lives}",
  url     =
"{https://www.renesas.com/us/en/products/power-power-management/wireless-pow
er/introduction-to-wireless-battery-charging}",
  urldate = "{April , 2023}",
  year    = "{2021}",
  address = "{[Accessed in April 2023]}",
}
@MISC{lcafigure,
  author  = "{Philips}",
  title   = "{Our approach to Life Cycle Analysis and Ecodesign. LCA
assessments and EPDs.}",
  url     =
"{https://www.engineeringsolutions.philips.com/looking-expertise/environment
-health-safety/life-cycle-analysis-lca-services/}",
  urldate = "{April , 2023}",
  year    = "{2023}",
  address = "{[Accessed in April 2023]}",
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