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## Chinese Craft in E-Commerce

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**Abstract:**

**Purpose:** This article aims to answer the following questions: (1) Does Chinese craftsmanship also have a future in the e-commerce space? (2) How do Chinese artisans find their professional activity in the field of e-commerce? (3) What issues related to Chinese crafts and e-commerce are the topics most often shown by the media?

**Design/Methodology/Approach:** The research used an analysis of the literature on the subject and Polish, English, and Chinese journalists published on the Internet.

**Findings:** The article describes the Chinese internet industry's formation, which has surprised many with its dynamics and scale over the past 30 years. Chinese craftsmanship in e-commerce was presented from the perspective of shaping the spirit of craftsmanship and changes and modern trends in the contemporary economy. This paper analyzes the profiles of the "young" generation of craftsmen, who show an openness to changes and introduce new solutions and the willingness to follow the latest trends.

**Practical Implications:** The presented results are important for the scientific community, mainly due to the apparent lack of materials related to craftsmanship and e-commerce and groups of craftsmen planning to expand their business with activity in the e-commerce space.

**Originality/Value:** Research results can contribute to increasing the knowledge about the activity of artisans in the field of e-commerce and exploring the information presented by the Polish, English, and Chinese media.

**Keywords:** E-commerce, People's Republic of China, crafts, economic culture.

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**Paper Type:** Research article.

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## 1. Introduction

Chinese craft is currently undergoing the so-called 'third wave' (Mignosa and Kotipalli, 2019). This ongoing scientific discussion of craft has been reflected in papers research (Pöllänen, 2009; Smagina and Ludviga, 2020; Rosner, 2009; Zulaikha Brereton, 2011; Waite, 1996; Gudowska, 2020; Spencer, 2016; Zabulis *et al.*, 2020; Abisuga-Oyekunle and Fillis, 2017; Luo, Wang, and Zhao, 2020; Qiandao and Yan, 2019). The value of craftsmanship has been appreciated mainly due to the quality of handmade goods and customers' consumption habits. The second group of factors includes cultivating the existing habits (this applies primarily to representatives of the older generation), paying attention to the small impact of the production activities of "an individual" on the natural environment (small-scale production often using natural materials), and sentiment regarding tradition passed from generation to generation, promoting local practices and favouring regional demand (Zhang, Walker and Mullagh, 2019).

The demand for products and services offered by craftsmen is also satisfied due to a trustworthy craftsman's personality traits, diversified activities (including offer), and decentralized location – proximity and accessibility (Graszewicz, 1973). The benefits resulting from online sales, specifically, convenient availability in terms of location and time, favour the last of the above-mentioned elements. Electronic commerce, also known as e-commerce or online commerce, is a new economic concept that has recently emerged and is becoming more and more popular with each passing year, also about technical activities. Offering products and services via the Internet lowers production costs (including commercial space and intermediaries, by using ready-made programs that facilitate the development of online business, etc.). It expands the market by enabling product targeting in a growing number of fields, even during the COVID-19 pandemic. This method is also used to reach young customers, who have developed new consumption habits and intuitively use online resources. Being a permanent element of the economic structure, Chinese craftsmanship (Graszewicz, 1973) clearly marks its presence in e-commerce, which provides new opportunities – primarily in the economy, but also in education and culture.

This article aims at answering the following questions:

- How does Chinese craftsmanship, often associated with tradition and cultural heritage, fit into the economic concept of e-commerce?
- How do modern artisans find themselves in e-commerce?
- What issues related to Chinese craftsmanship and online commerce are discussed in Polish, English, and Chinese media?

## 2. Material and Methods

The research was based on a literature review provided by Polish, English, and Chinese journalists published on the Internet. Even though the craft is not a new economic structure element, it has not been explored by economic researchers for

years. Although technical descriptions and articles about innovative solutions are available on Internetwork, craftsmanship as a “whole” is rarely discussed. This applies to articles on Polish and Chinese crafts written in Polish, English, and Chinese, which were analysed in this study. Along with the change in the Chinese government's attitude, which now attempts to revitalize Chinese handicrafts (Zhang, Walker, and Mullagh, 2007), some articles discussing this revival are now available on the Internet. However, these are very brief and general materials. Most frequently, these articles refer to the importance of the spirit of craftsmanship [工匠精神]. This category appears regardless of what specific topics are being researched. Therefore, this study is subject to several limitations, which indicate the need for continuing research in the future.

### 3. Chinese Internet Industry

The concept of the online economy in China was introduced in the People's Republic of China (PRC) in the early 1990s. After 1993, the company Sohu.com [搜狐] became the most influential provided services related to online advertising, games, and research. In 1996, the first e-commerce company specializing in business-to-business (B2B) solutions was established in China. In 1998, the Chinese Ministry of Information Industry was established, which was replaced by the Ministry of Industry and Information Technology [中华人民共和国工业和信息化部] in 2008. In 1999, the technology corporation Sina [新浪] was established. It provides such services as social media platform Sina Weibo [新浪微博], Sina Mobile [新浪移动] – an online information portal which includes - Sina News, Sina Finance, Sina Sports, Sina Entertainment, Sina Blog, and Sina.com [新浪网] offering online advertising and marketing solutions. The IT sector in China grew at a rate of 25% annually. In the years between 2000 and 2002, the IT industry faced a crisis that ended by 2003. Between 2005 and 2008, the IT sector grew by more than 40% annually. The following corporations dominated the market: Tencent [腾讯控股有限公司], Shanda [盛大互动娱乐有限公司] and Alibaba [阿里巴巴集团控股有限公司], which also includes the AliExpress sales service [全球速卖通], which is well-known in Poland (Du 2009, 1175-1178).

In 2009, the Chinese Ministry of Commerce [中华人民共和国商务部] established the specification of the e-commerce model and the standards of online shopping services (Yue, 2017). Because e-commerce promotes innovation and improves production efficiency, the online sector was selected as a starting point in restructuring and furthering the PRC's economic development. Furthermore, according to some experts in China, E-commerce promotes corporate innovation, improves a company's internal organization, optimizes supply chain operations, and performs the external economic environment (Wang and Wang, 2019). In 2018, Alibaba was the strongest player in the B2B e-commerce. It owns Alibaba.com [阿里巴巴网], 1688.com [1688网], Tmall.com [天猫网], Taobao.com [淘宝网], and Lazada.com [来赞达网]. In 2019, Alibaba continued to lead in the ranking of e-

commerce retail sales with 55.9% share, followed by Jingdong.com [京东网] – with a 16.7% share (China Ecommerce, 2019). As part of the B2B industry, the following platforms are also active in the Chinese market: HC360.com [慧聪网] and VIP.com [唯品会网] (E-Commerce in China, 3-4). In terms of business-to-end customer relationships (B2C), Tmall.com, which covers more than half of the Chinese market, is followed by Jingdong.com, VIP.com, Suning.com [苏宁易购] and Pinduoduo.com [拼多多网].

China is also the largest mobile payment country in the world. Alipay, owned by Alibaba, dominates the online payment market. Alipay offers several convenient services that allow customers to collect a payment only after the ordered goods have been received (E-Commerce in China, 17-18). During her studies in the PRC, the author often bought fruit directly from wheelbarrows of visiting farmers, who replaced a price list with QR codes to be paid via WeChat Pay [微信支付] as part of Tencent. This proves not only the universal character of such solutions but also the convenience of the service. The application allows the customers to make internal transfers, purchase tickets for events, and even occasional transfers, known in China as a red envelope [红包] which may be personalized (by specifying the amount assigned to a specific recipient) and randomized (with a specific total amount and number of recipients, the application randomly distributes funds, thus making symbolic transfers). In 2019, online retail sales in China generated nearly US \$ 1.5 trillion, which is 1/4 of total retail sales achieved.

This has been reflected in the increasing competition in e-commerce and the need to cover the costs of acquiring and maintaining customers. On average, Chinese consumers spend 44% of their time using social platforms, mainly WeChat and Sina Weibo.com microblogging [微博] - TikTok, they also watch, share, and create short videos on Douyin.com [抖音短视频] and Tencent video streaming services – Wetv.vip [腾讯视频] (Bu *et al.*, 2019). It is estimated that by 2023, this continuing online activity will result in e-commerce sales accounting for 63.9% of total retail sales in China (China Ecommerce, 2019).

#### **4. Results - E-Commerce as Part of Chinese Crafts**

In the Chinese web portal TianYanCha.com [天眼查] under the heading e-commerce crafts [工匠电子商务], 328 companies are registered which provide handicraft services with share capital between 100,000 RMB [approximately US \$ 14,688] and RMB 500 million [the US \$ 73,436,198]. However, most often, customers search for these services online through e-commerce platforms – Taobao.com and Jingdong.com. There has also been a development of mobile handicraft applications for smartphones and tablets, enabling online shopping, communication, access to instructional videos, and graphic tips. They include such apps as Do-It-Ymaourselfer [手工客], Funny Cut-Outs [妙趣剪纸] designed to create traditional Chinese cut-

outs, Shicui [拾翠] providing personalized traditional Chinese craftsmanship services, Eastern Designers [东家] and Wowtao [哇陶] devoted to ceramic modeling.

Along with online trade, e-commerce embraces other activities such as telling stories, sharing passions, presenting both national/regional culture, and documenting the process of creating products. For example, Jingdezhen [景德镇], also known as the hub of porcelain, organize online broadcasts that last several days showing the firing of ceramics. Live broadcasts attract over 3 million viewers to computer screens (电商时代的工匠们). It can be said that the craftsmen of the 21st century are becoming celebrities of the Internet [网红工匠].

For example, the welder Geng Shuai [耿帅] attracts over 3.6 million viewers by using a short video platform to showcase his inventions. Similarly, the designer of paper umbrellas Yu Wanlun [余万伦] presents the creative process and his products on the Internet (刘峒, 2019). Chu Chengzhang [储诚长] uses e-commerce platforms to distribute tea, enabling the virtual planting of it. In this way, potential customers can learn about tea culture and develop an interest in drinking tea (王磊 2015). These types of activities are financially significant – through advertising and promotion, they increase sales.

It is believed that this tendency will continue to develop. Moreover, it has been estimated that live broadcasting will have an increasing impact on consumer shopping behaviors. According to the Coresight Research Report, in 2020, the Chinese e-commerce industry will focus on operations (including sales and e-customer service), using applications designed to create short films (10-20 seconds long), active online sales of previously owned goods, develop group purchases (cheaper purchases when ordering more goods), introduce mini-programs as a supplement to existing sales channels (launching additional functions within already used applications), accelerate deliveries (by modernizing the logistics infrastructure and increasing the capacity of customs warehouses), develop a data-driven C2M model (factories will become consumer-driven, which will speed up e-commerce), provide vertical e-commerce sites (sales platforms targeting specific customer groups which capable of cooperating in the online community) and strengthen cross-border electronic commerce.

Taobao villages [淘宝村] are e-commerce hubs located in rural areas, such as the provinces of Zhejiang [浙江], Guangdong [广东], and Jiangsu [江苏]. In 2013, there were 20 of them, and five years later – 3200 (The "Taobao Villages" Phenomenon: How E-commerce (also) Redefines Rural Areas in China). Taobao villages boost the local economy, generating nearly 6.8 million jobs between June 2018 and June 2019. In 2019, 63 villages collectively generated approximately RMB 2 billion revenue (US\$ 293,734,071) through online sales of handicrafts, agricultural products, and industrial goods (Wang, 2019).

In the Chinese media, e-commerce and handicrafts are most often presented by referring to either the spirit of craftsmanship or handicrafts' changes and adaptation to modern trends in the contemporary economy. Studies related to the spirit of craftsmanship aim to answer whether, nowadays, in the age of globalization and understood digitization, it is necessary to cultivate the spirit of craftsmanship. This concept proves the quality of services diligence, dedication, and continuous improvement of a given professional group and requires following an ethical path – maintaining high standards, gaining social respect, and increasing craftsmen's social status. The articles present socialist ideas and warn against false artisans operating online, who are defined as incompetent.

According to the Report on the Integrity of the E-Commerce Industry [电商行业诚信度调研报告] presented in 2018, over 90% of consumers shop online, and more than half of the – 49% – have experienced unethical online behaviors. The unethical behaviors of false artisans' manifest in deliberately suppressing a product's defects (an inability to see the goods before purchasing them), offering products that do not comply with what has been advertised, failing to meet pre-sale obligations, delays in deliveries (too long a waiting time) and unfair price manipulation. The importance of intellectual property protection is also emphasized through filing patents and promoting professional ethics. Spreading the spirit of craftsmanship starts in vocational schools, e.g., by developing a university culture on campus [校园文化] (浙江缙云县以 "工匠精神" 滋养学生职业教育).

The second tendency promotes young artisans, who are China's new strength in supporting industrial innovation. Young artisans are described as more innovative, courageous, open to changes, and able to use the team's strength and various marketing strategies in running their own profit-making activities. To develop such skills among the young generation of artisans and craft teachers, they can participate in training and competitions devoted to online craft activities. These include:

- *Bayu Craft Competition* [巴渝工匠], directed at vocational schools of the city of Chongqing, organized by the Chongqing Vocational School of Transport [重庆交通职业学院]. The competition consists of three stages: decorating an online store, e-customer service and supporting the operation of the online store (开网店 做运营“巴渝工匠”杯电子商务技能赛项开赛);
- Competition for Vocational Schools in Hunan Province [湖南省], organized by the Hunan Department of Education [湖南省教育厅], Department of Human Resources and Social Security of Hunan Province [湖南省人力资源和社会保障厅], Provincial Cross-Border E-Commerce Association [湖南省跨境电商协会] and the Publishing House of Universities [高等教育出版社]. The competition concerns data analytics, visual marketing, marketing planning, online marketing, customer service, online store operations, product integration and teamwork (【工匠文化节专题】2020年高职电子商务技能竞赛我校两支代表队双双荣获一等奖);

- Competition of Skills in *Mushroom Crafts* [菇乡工匠], targeting e-commerce people in Qingyuan County [庆元县] on tackling poverty and innovation in the development of e-commerce, organized by the Talent Group Office of the Qingyuan County Party Committee [中共庆元县委人才工作领导小组办公室]. The competition includes creating short videos, e-customer service, support activities for courier companies and e-commerce in rural areas. In addition to cash prizes, winners are awarded certificates of professional competence (青·关注】庆元县“菇乡工匠”技能擂台赛暨第六届农村电子商务技能比武大赛来啦!);
- Competition for e-commerce lecturers *Putian Craftsman Cup* [莆田工匠杯], co-financed by the China International E-Trade Center [中国国际电子商务中心], the Local Government of Putian [莆田市人民政府], the Teaching Committee for Higher Education specialised in E-commerce [教育部高等学校电子商务类专业教学指导委员会] and the China Association for Continuing Engineering Education [中国继续工程教育协会] (莆田工匠杯”第四届中国电商讲师大赛全国总决赛圆满收官);
- Project of technical vocational video training [勒流街道 2020 年电子商务“视频制作”], organized by the Human Resource and Social Security Office in the Liuliu District of Foshan city [佛山市德区勒流街道人力资源和社会保障] (勒流街道 2020 年电子商务“视频制作”技术职业技能工匠班招生啦).

## 5. Conclusion

The Chinese online industry has been growing consistently since the 1990s. It has been estimated that e-commerce sales will account for over 60% of total retail sales in China in a few years. Due to the development of information and communication technologies in the manufacturing sector, the transformation towards digitization and automation has become evident (Xu, Chin, and Cao, 2020). This also applies to Chinese crafts. New online solutions are also used for craft services. Therefore, artisans use online sales platforms, become active online, create applications for mobile devices, etc., while maintaining the tradition which is inextricably linked with the essence of craftsmanship.

By offering their services through the latest communication channels, artisans continue to be tradition-oriented, share their passion, receive recognition (followers), and use short videos to talk about their works/products and methods of manual production. They aim to develop and maintain these specific interpersonal and indirect relationships and establish a sense of closeness and accessibility between the creator - craftsman and the final e-customer, which results in customers' interest in their work.

As part of Chinese craftsmanship, e-commerce is presented in the media mainly from the perspective of developing the spirit of craftsmanship – the features of an exemplary craftsman both in terms of ethics and professional mastery and the need to introduce changes and follow modern tendencies. The presented profiles of young artisans show that educated people, who gain professional experience in a plant or industry, are open to changes and introduce new solutions and online sales. Owing to e-commerce and economic benefits, they can achieve educational and social goals, and by establishing a relationship with customers from outside China, they can also share knowledge about the history and culture of their country.

## References:

- Abisuga-Oyekunle, O.A., Fillis, I.R. 2017. The Role of Handicraft Micro-Enterprises as a Catalyst for Youth Employment. *Creative Industries Journal*, 10, <https://doi.org/10.1080/17510694.2016.1247628>.
- Berkshire Encyclopedia of China. 2016. Berkshire Publishing Group Great Barrington, Massachusetts.
- Bu, L., Wang, J., Wang, K.W., Zipser, D. 2019. China digital consumer trends 2019. McKinsey Digital. Retrieved from: <https://www.mckinsey.com/~media/mckinsey/featured%20insights/china/china%20digital%20consumer%20trends%20in%202019/china-digital-consumer-trends-in-2019.ashx>.
- China Ecommerce 2019. 2018. Retrieved from: <https://www.emarketer.com/content/china-ecommerce-2019>.
- E-Commerce in China. 2018. VEDP International Trade. Retrieved from: [http://exportvirginia.org/wp-content/uploads/2018/08/E-Commerce\\_China\\_Aug\\_2018.pdf](http://exportvirginia.org/wp-content/uploads/2018/08/E-Commerce_China_Aug_2018.pdf).
- Ernst, D., He, J.C. 2000. The Future of E-Commerce in China. *Analysis from the East-West Center*, 46.
- Graszewicz, H. 1973. Pojęcie i miejsce rzemiosła w gospodarce narodowej. *Ruch Prawniczy, Ekonomiczny i Socjologiczny*, 35, 1. Retrieved from: <https://repozytorium.amu.edu.pl/handle/10593/19462>.
- Gudowska, B. 2020. Arts and Crafts and UN Sustainable Development Goals. *International Journal of New Economics and Social Sciences*, 1(11). DOI: 10.5604/01.3001.0014.3547.
- Lucas, B., Spencer, E. 2020. A Practical Guide to Craftsmanship. Creating the craftsmen and women that Britain needs. Centre for Real-World-Learning. Retrieved from: [https://pdfs.semanticscholar.org/0729/e9381f6ba383213863133585b8cd967ad84e.pdf?\\_ga=2.221583581.479295930.1599455917-471672534.1597229024](https://pdfs.semanticscholar.org/0729/e9381f6ba383213863133585b8cd967ad84e.pdf?_ga=2.221583581.479295930.1599455917-471672534.1597229024).
- Luo, Q.L., Wang, C.Y., Zhao, Y. 2020. Cultivation Strategy of College Students' Craftsman Spirit from the Perspective of Artificial Intelligence. *Journal of Physics: Conference Series* 1575, DOI:10.1088/1742-6596/1575/1/012173.
- Mignosa, A., Kotipalli, P. 2019. *A Cultural Economic Analysis of Craft*. Palgrave Macmillan.
- Modumag. 2020. The “Taobao Villages” Phenomenon: Hoe E-commerce (also) Redefines Rural Areas in China. 2020. Retrieved from: <https://www.modumag.com/articles/the-taobao-villages-phenomenon-how-e-commerce-also-redefines-rural-areas-in-china>.



- Pöllänen, S. 2009. Contextualizing Craft: Pedagogical Models for Craft Education. *International Journal of Art and Design Education* 28(3).
- Retail 2020. 10 Trends for China E-Commerce. 2020. Core sight Research. Retrieved from: <https://coresight.com/research/retail-2020-10-trends-for-china-e-commerce/>.
- Rosner, D.K. 2009. Considering Craftsmanship. UC Berkeley School of Information, Berkeley. Retrieved from: [https://www.ideals.illinois.edu/bitstream/handle/2142/15263/Poster\\_Rosner\\_forpub\\_1.pdf?sequence=2&isAllowed=y](https://www.ideals.illinois.edu/bitstream/handle/2142/15263/Poster_Rosner_forpub_1.pdf?sequence=2&isAllowed=y).
- Smagina, A., Ludviga, I. 2020. Craft Entrepreneurship and Created Value. *Rural Environment Education. Education. Personality*, 13. Doi: 10.22616/REEP.2020.044.
- Waite, W.M. 1996. Compiler construction: Craftsmanship or engineering? In: *Compiler Construction*. Ed. Gyimóthy T., Lecture Notes in Computer Science, 1060 (Springer). DOI: 10.1007/3-540-61053-7\_59.
- Wang, J. 2019. Taobao Villages Driving ‘Inclusive Growth’ in Rural China. Retrieved from: <https://www.alizila.com/taobao-villages-driving-inclusive-growth-rural-china>.
- Wang, X.T., Wang, H. 2019. A Study on Sustaining Corporate Innovation with E-Commerce in China. *Sustainability*, 11(6604). Doi:10.3390/su11236604.
- Xu, Z.H., Chin, T.C., Cao, L.L. 2020. Crafting Jobs for Sustaining Careers during China’s Manufacturing Digitalization. *Sustainability*, 12(2041). Doi:10.3390/su12052041.
- Yue, H.F. 2017. National Report of E-Commerce Development in China. Inclusive and Sustainable Industrial Development Working Paper Series, Working Paper 17, UNIDO, Vienna.
- Zabulis, X. *et al.* 2020. Representation and Preservation of Heritage Crafts. *Sustainability* 12(1461). doi:10.3390/su12041461.
- Zhang, W.L., Walker, S., Mullagh, L. 2019. Craft and Sustainability: Reflections on Design Interventions in Craft Sector in China. *International Association of Societies of Design Research Conference 2019*. Manchester School of Art Manchester Metropolitan University.
- Zhu, Q.D., Yu, Y. 2019. Methods and Strategies for Cultivating "Craftsman Spirit" of Landscape Architecture Students. *Advances in Social Science, Education and Humanities Research*, 345, 3rd International Seminar on Education, Management and Social Sciences.
- Zulaikha, E., Brereton, M. 2011. Innovation strategies for developing the traditional souvenir craft industry. In: “The First International Postgraduate Conference on Engineering, Designing and Developing the Built Environment for Sustainable Wellbeing”. Queensland University of Technology, Brisbane, Qld. Retrieved from: <http://eprints.qut.edu.au/43468/>.
- 刘峒. 2019. 短视频让中国工匠变“网红”. Retrieved from: [http://www.legaldaily.com.cn/Finance\\_and\\_Economics/content/2019-11/18/content\\_8049620.html](http://www.legaldaily.com.cn/Finance_and_Economics/content/2019-11/18/content_8049620.html).
- 勒流街道 2020 年电子商务“视频制作”技术职业技能工匠班招生啦. Retrieved from: [https://www.sohu.com/a/403753032\\_99970611](https://www.sohu.com/a/403753032_99970611).
- 华晓龙, ”电子商务人才工匠精神内涵及特征. Retireved from: <https://www.21ks.net/lunwen/shitijingjiluwen/136531.html>.
- 开网店 做运营 “巴渝工匠”杯电子商务技能赛项开赛. 2019. Retrieved from: <http://cq.people.com.cn/GB/371335/news/201941/2019411857558744505.htm>.
- 浙江缙云县以“工匠精神”滋养学生职业教育. 2017. Retrieved from: <http://www.cvae.com.cn/zgzcw/zjs/201705/4ce081671a3a40219b95de6cf479a07c.s.html>.

- 王磊. 2015. 互联网+”时代更需要大国“工匠精神. Retrieved from:  
[http://www.gov.cn/zhengce/2015-08/05/content\\_2908870.htm](http://www.gov.cn/zhengce/2015-08/05/content_2908870.htm).
- 电商时代的工匠. 2017. Retrieved from:  
[https://www.financialnews.com.cn/cul/zewh/201708/t20170825\\_123398.html](https://www.financialnews.com.cn/cul/zewh/201708/t20170825_123398.html).
- 莆田工匠杯”第四届中国电商讲师大赛全国总决赛圆满收官. 2019. Retrieved from:  
[http://ciecc.mofcom.gov.cn/article/dwpx/201912/1368925\\_1.html](http://ciecc.mofcom.gov.cn/article/dwpx/201912/1368925_1.html).
- 【工匠文化节专题】2020年高职电子商务技能竞赛我校两支代表队双双荣获一等奖.  
2020. Retrieved from: <http://www.hnjd.net.cn/xjxw/9174.jhtml>.
- 【青·关注】庆元县“菇乡工匠”技能擂台赛暨第六届农村电子商务技能比武大赛来啦.  
Retrieved from: [https://zj.zjol.com.cn/red\\_boat.html?id=100802607](https://zj.zjol.com.cn/red_boat.html?id=100802607).