



INDUSTRY DIGITAL ROADMAP FOR LEGAL SERVICES

A guide for firms to assess digital
readiness and opportunities to go digital



Industry Digital Roadmap for Legal Services :
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FOREWORD



“Malaysia Productivity Corporation (MPC) through Professional Services Productivity Nexus (PSPN) is committed to boosting the professional services industry to its positive productivity growth and cementing its place as among the main contributors to Malaysia’s economy. I urge the industry players to leverage this digital roadmap to increase productivity.”

Dato’ Abdul Latif bin Haji Abu Seman
Director General
Malaysia Productivity Corporation (MPC)



“The industry is entering the new era, characterised by smart professionals, sustainability, and industry 4.0. Technology and digitalisation are the essence of professional services in the new era. This digital roadmap serves a good guide.”

Ts. Ir. Choo Kok Beng
Champion
Professional Services Productivity Nexus (PSPN)

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BACKGROUND

Implementing Industrial Revolution 4.0 is a massive challenge to businesses due to lack of technological capabilities and digital skills in preparation of emergencies of new technologies in the future (Ahmad, 2016). Due to this challenge, Malaysia is still facing shortage of skilled workers to fit in appropriate job skills (Syed Yahya et al., 2021). IR 4.0 enable technologies to contribute towards competitive advantages in the entrepreneurial discovery processes. It allows businesses to stay connected, increased economic growth and competitiveness, and human empowerment through digitalization of essential business processes.

According to Vellinga and Wieczorek (2001), major transformations in business operations are required to sustainably grow a business, particularly in the context of a rapidly changing business environment.

The concept of IR 4.0 is aimed to realise digital technologies in industrial processes such as major field of applications including Big Data, Cybernetic-Physical System, Internet of Services, Internet of Things, Smart Factory, Interoperability and other domains (Dalenogare et al. 2018).

In comparison to previous industrial revolutions (IR), IR1.0 and IR2.0 were defined by mechanisation and electrification of manufacturing processes, while the third IR was defined by informationalisation and automation of those processes (Bauernhansl, 2014). The current revolution (IR 4.0) is being driven by cyber-physical systems, which incorporate both physical and computational elements (Manyika et al., 2013) in value creation across digital ecosystems (Ibarra et al., 2018; Schmidt et al., 2015).

Consequently, IR 4.0 and digital transformation are the push factors that contribute to the need for professionals to enhance their skills, knowledge, and competencies. Furthermore, firms, statutory bodies, and professional associations also need to embrace the above. Therefore, this study intends to identify the digital knowledge and/or technical skillsets, and digital tools required by engineering and legal professionals in Malaysia.

Today businesses are expected to alter their operations and processes to produce higher-quality goods and services by incorporating cutting-edge technology and digitalised procedures (Lepore & Spigarelli, 2020)

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LEGAL PROFESSIONAL SERVICES SECTOR

There are **9,515 registered law firms** and **21,835 registered lawyers** in Malaysia. Perlis, Putrajaya, and Labuan are classified as “Other”. The data on lawyers in Sarawak is not publicly available.

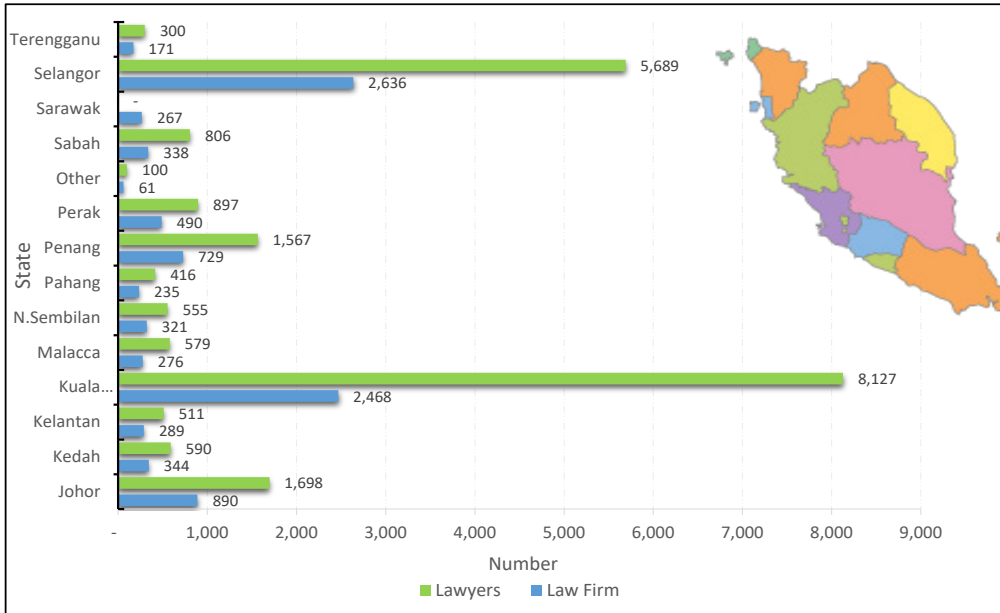


Figure 1 Number of Lawyers and Law Firms by State in Malaysia

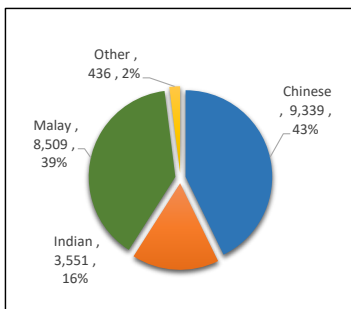


Figure 2 Lawyers by Ethnicity in Malaysia

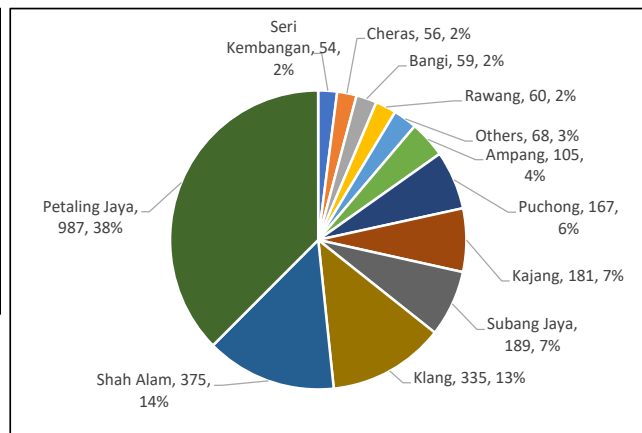


Figure 3 Law Firms by City in Selangor

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TYPES OF LEGAL SERVICES

Litigation



Civil litigation/dispute resolution solicitors **issue court proceedings and deal with disclosure and drafting witness statements.** They instruct Counsel to attend the trial, prepare trial bundles and all the documentation required by the court both pre- and post-trial.

Intellectual Property



Intellectual Property law deals with laws to **protect and enforce rights of the creators and owners of inventions, writing, music, designs and other works**, known as the “intellectual property.” There are several areas of intellectual property including copyright, trademarks, patents, and trade secrets.

Advisory



Lawyers that **advise clients on legal matters, represent clients before administration boards and draw up legal documents such as contracts and wills.** Lawyers also plead cases, represent clients before tribunals and conduct prosecutions in courts of law.

Contractual



Contract Lawyers **help companies to establish foundation of the regulation in documentation or paperwork** they need to build a successful business by minimising risk and protecting their interests should things go wrong.

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TRENDS IMPACTING LEGAL PROFESSIONS

Challenges toward adaption in digitalisation



Transformation has challenged core firms in producing and circulating knowledge via learning and development with the support of modern technologies (Littlejohn et al., 2021)

Investing in software is expensive, firms need to find alternative solution which is more economic to improve productivity and knowledge.

Overcome barriers of delivering changing client expectations



Law firms are facing growing struggle of tough environment – satisfying dynamic client requirements (Kohnová et al., 2019). Due to this factor, the legal profession needs to emphasise more in talent within individuals. Therefore, generic and specific skillsets needed to deliver promising outcome to the client.

Increasing importance towards technological disruption



Artificial intelligence also triggers changing customer behaviour and new demands in terms of value, speed, and flexibility in the industry.

Handling increasing in size and complexity of information



As the services move forward, the number of cases, requests and legal works are steadily increasing. These trends eventually expose the firms and all legal professions to prepare for handling massive amounts of information as well as interpreting the complexity of the information.

Focus on improving productivity



Legal professionals are starting to explore any possibilities of knowledge, skills or technologies that could assist them in work productivity. Discovering suitable approaches could greatly assist them in their work productivity.

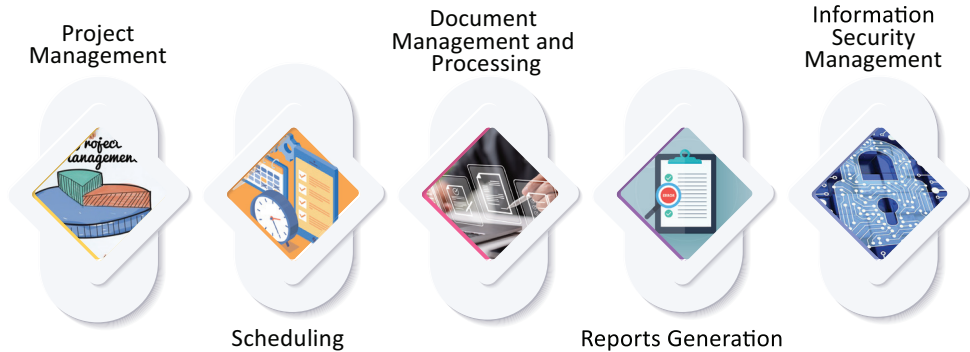
Leadership expectation



Good and capable leadership will bring the teams forward and improving the firm's reputation. Individual that possessed strong leadership quality is likely to guide the team into success.

GENERIC DIGITAL KNOWLEDGE AND TECHNICAL SKILLSETS REQUIRED BY LEGAL PROFESSION

Generic Digital Knowledge



Common digital tools and software required

Project Management - software is to streamline the workflow of a team working on the same project	Documents management - storing, managing, and tracking digital information using a computer software application	Report generation - provides reporting, decision making, and business intelligence capabilities	Scheduling - Tools for scheduling operations, including time tracking, employee communication, and work schedule management
<ul style="list-style-type: none">• Aha!• BigTime• GanttPRO• Flowlu• Avaza	<ul style="list-style-type: none">• DocuWare• Dropbox Business• Clio Manage• eFileCabinet• Google Drive• Laserfiche• LogicalDOC• M-Files• SharePoint	<ul style="list-style-type: none">• ProWorkflow• Hive• Google Data Studio• Power Bi in Office 365• Tableau• Thoughtspot• Octaboard• Zoho Analytics	<ul style="list-style-type: none">• HoneyBook• Resource Guru• Nowsta• Bookwhen• Vectera

DIGITAL KNOWLEDGE AND TECHNICAL SKILLSETS REQUIRED BY LEGAL PROFESSION

As digital knowledge and technical skill sets become increasingly important in the legal field, lawyers should be prepared for the globalisation of their legal practices (Kuznetsova et al., 2021). The findings from the interviews with the lawyers and the management of the legal firms with regard to the knowledge and skillsets required by the legal profession are categorised into three main legal services provided by the legal firms i.e., Research, Operations, and Submission. The findings revealed that legal professionals who perform these three legal services required different digital knowledge and skillsets.

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DIGITAL KNOWLEDGE AND TECHNICAL SKILLSETS REQUIRED BY LEGAL PROFESSION

	Research	Operation	Submission
Litigation	<p>Case's facts and identifying the legal issue</p> <p>Understand underlying concepts in a particular field</p>	<p>Practise of law by providing evidence, credible sources, and historical context for cases</p>	<p>Effective resource management</p>
Intellectual Property	<p>Knowledgeable in one or more technical fields relevant to a client's inventions</p>	<p>Technical fields relevant to a client's inventions.</p> <p>Customer relationship management and building trustworthy relationships with clients</p>	<p>Effective resource management</p>
Advisory	<p>Operation management tools in a variety of fields, financial, business, and legal expertise</p> <p>Understand underlying concepts in a particular field</p>	<p>Extensive knowledge of operation management tools</p>	<p>Effective resource management</p>
Contractual	<p>Transactional work, such as the purchase, sale or rental of property</p> <p>Personal computing tools and software</p>	<p>Computer Literacy</p>	<p>Effective resource management</p> <p>Online communication</p>
In-house	<p>Knowledge of the various sources of legal authority</p>	<p>Computer Literacy</p>	<p>Effective resource management</p> <p>Online communication</p>








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DIGITAL TOOLS AND SOFTWARE

	Research	Operation	Submission
Litigation	<ul style="list-style-type: none"> • Lexis Nexis • Current Law Journal • Westlaw 	<ul style="list-style-type: none"> • Google Drive, • Dropbox • Google Workspace 	<ul style="list-style-type: none"> • Microsoft tools • e-Discovery tools
Intellectual Property	<ul style="list-style-type: none"> • Lexis Nexis • Current Law Journal • WestLaw • Lloyd's Law Reports 	<ul style="list-style-type: none"> • Quickbooks • Gusto • Rippling • Aha! • Bigtime • Flowlu • Prospect CRM 	<ul style="list-style-type: none"> • Resource Guru • HoneyBook • Vectera • Microsoft tools • Reporting tools
Advisory	<ul style="list-style-type: none"> • Lexis Nexis • Current Law Journal 	<ul style="list-style-type: none"> • Quickbooks • Gusto • Rippling • Aha! • Bigtime • Flowlu • EngageBay 	<ul style="list-style-type: none"> • Resource Guru • HoneyBook • Vectera • E-filing System • Google Workspace • Microsoft tools
Contractual	<ul style="list-style-type: none"> • MyLegalSoft • Lexis Nexis • Current Law Journal 	<ul style="list-style-type: none"> • Google Drive • Dropbox • Microsoft Tools • Google Workspace 	<ul style="list-style-type: none"> • Microsoft Tools
In-house	<ul style="list-style-type: none"> • Lexis Nexis • Current Law Journal • WestLaw 	<ul style="list-style-type: none"> • Transcend • CMO Compliance • Prospect CRM 	<ul style="list-style-type: none"> • Microsoft tools • e-Discovery tools • Clio Manage • Google Workspace

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DIGITAL ROADMAP




Stage 1	Stage 2	Stage 3
Getting Ready for the Digital Economy	Growing In the Digital Economy	Leaping Ahead
Uplifted Digital Capabilities, Optimised Operations	Integrated Ecosystem, Streamlined Processes	Intelligent Business, Autonomous Operations
 Research and Information Management  Information and Workflow Automation  Digital Submission for Courts	 Coordinated Regulatory Approvals and Court Acceptance  Integrated and Smart Worksite Monitoring and Management	 Data and AI-Driven DSS  Blockchain for Courts Verification



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STAGE 1: GETTING READY FOR THE DIGITAL ECONOMY

Solution Category	Description	Benefits
 Research and Information Management	<p>Research is the process of finding answers to legal questions. It validates legal precedent which can be cited in trial.</p> <p>Incorporated with information management, research allows information readily available.</p>	<ul style="list-style-type: none"> • Improve research skills • Grow reputation and global recognition • Easy accessibility towards information
 Information and Workflow Automation	<p>Information and Workflow Automation assist in day-to-day activities such as e-mail, reminder, scheduling, and file management. All the process is automated.</p>	<ul style="list-style-type: none"> • Improve work efficiency • Reduce time wastage towards non-priority works • Increase work productivity
 Digital Submission for Courts	<p>Digital submission involves softcopy of the documents that needs to be send before proceedings begin.</p>	<ul style="list-style-type: none"> • Reduce printing costs • Avoid wastage of resources • Environmental-friendly

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STAGE 2: GROWING IN THE DIGITAL ECONOMY

Solution Category	Description	Benefits
 Coordinated Regulatory Approvals and Court Acceptance	Verification of coordinated submission for the panel approval in regulatory process.	<ul style="list-style-type: none"> • Streamline submission and approval process • Improve quality through verification process
 Integrated and Smart Worksite Monitoring and Management	Real-time monitoring process in digital environment using various technologies such as virtual meetings, video conferencing and virtual court proceedings. Tools are used to conduct on-site activities including motion-sensor camera, microphone, translator and voice transcript devices.	<ul style="list-style-type: none"> • Allow flexibility in meeting with the clients • Save time in conduct meeting or hearing • Analyse data and produce dashboards to assist in decision making process • Improve work management





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STAGE 3: LEAPING AHEAD

Solution Category	Description	Benefits
 Data and AI-Driven Decision Support System	<p>Assist user in policy or decision-making process through data analytics and machine learning models.</p> <p>Training of models based on historical data to produce higher accuracy in prediction such as case verdicts, and declaration of documents.</p>	<ul style="list-style-type: none">• Better assists in decision making process• Optimise solutions• Reduce human error• Produce high quality of solutions and suggestions
 Blockchain for Courts Verification	<p>Record minutes meeting and case management progress efficiently and consistently in user friendly way.</p>	<ul style="list-style-type: none">• Improve security in confidential files and other important information• Reduce maintenance cost

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DIGITAL ROADMAP ON TRAINING

 Staff Training Courses	 Tech-Based Courses
Stage 1: Getting Ready for the Digital Economy <ul style="list-style-type: none">• Client Management• Document Management	<ul style="list-style-type: none">• Automated System• Project Management• Information Management
Stage 2: Growing in the Digital Economy <ul style="list-style-type: none">• Case Management• Research skills• Fact findings• Communication skills	<ul style="list-style-type: none">• Database Management• Report Generation• Remote platform
Stage 3: Leaping Ahead <ul style="list-style-type: none">• Data Analytics• Leadership skills	<ul style="list-style-type: none">• Artificial Intelligence• Machine Learning• Expert System• Internet of Things



RESEARCH FINDINGS

Based on the **research findings**, several policies are **recommended**:

- Government to consider offering a wide range of tax incentives, including tax allowances and exemptions to encourage legal practitioners and firms to be more receptive towards legal technology including relevant and advanced digital tools and software
- Government to consider subsidising the costs for tools and software due to its high maintenance costs and subscriptions which are the primary reason that prevent firms from utilising the platforms.
- Developing an integrated, centralised platform as this can save money in a wide range of areas, such as licence fees for numerous software packages and data administration functions. Data collection and analysis from distributed platforms can be time consuming, and as such, having a centralised platform eliminates the need to consult multiple data sources. Centralised management assures firms and lawyers of a full view of their operations, regardless of where they are managed.
- Establishing guidelines and standards for the use of legal technology, including data privacy and security protocols, to ensure that lawyers, judges and courts use these tools in a responsible and ethical manner.

The following are recommended for professional practice:

- Collaborate with technological companies to develop solutions tailored to lawyers' needs to help improve the efficiency and effectiveness of their practices.
- Consult with lawyers to understand their challenges and needs and using this feedback to inform the development of new legal technological products and services.
- Encourage collaboration and communication among lawyers to share best practices and insights on the use of legal technologies through online forums, networking events, and other opportunities for lawyers to connect and learn from one another.
- Encourage and provide training to close the gap between legal practitioners who are familiar with legal technology versus those who lack the knowledge to utilise the technology in their services.

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Three groups of respondents interviewed face-to-face comprise those from: (a) professional bodies, regulatory and associations; (b) legal firms; and (c) individual lawyers. Suitable respondents are those who have authority or expertise in the area studied.

Respondents were selected from the legal professions, inclusive of the management of legal firms and individuals who are also lawyers. Respondents from professional bodies, regulatory agencies, and associations were also selected for interview.

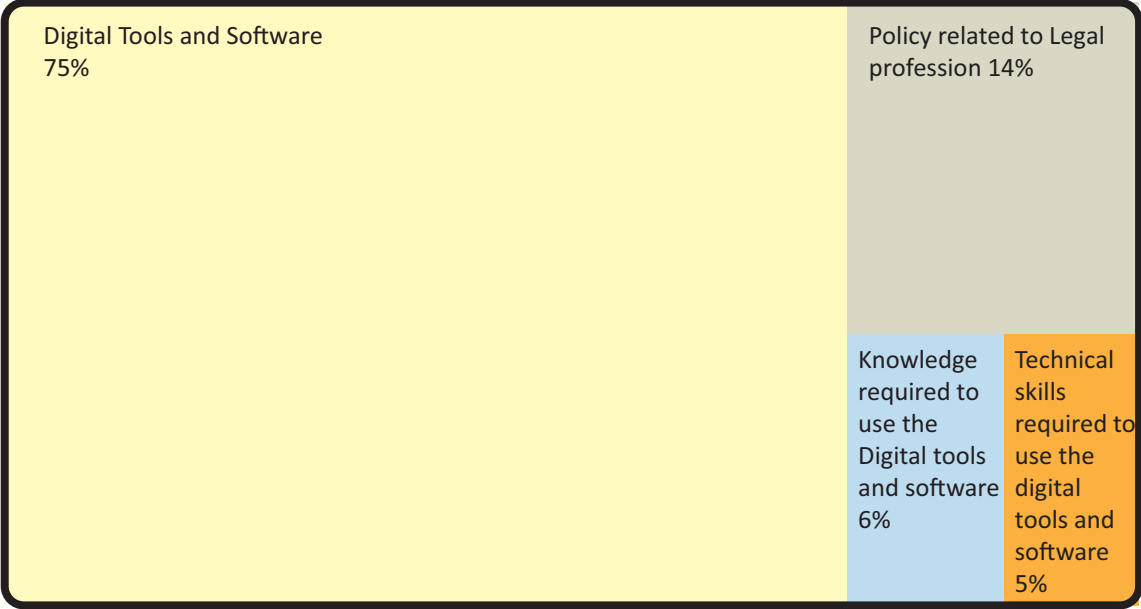


Figure 4 : Tree Map of Thematic Coding from Interview Findings of Legal Profession

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NOTES



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