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Creating Value Through Service Innovation

1. Overview of Service Sector

1.1 Why is the services sector so important?

The largest sector of Singapore's economy is service. It accounts for 72% of the Gross Domestic Product (GDP). The five most important segments and their contribution to the GDP are:

1. Wholesale and retail trade (18%)
2. Business services (16%)
3. Finance and Insurance (13%)
4. Transport and Storage (10%)
5. Information and Communications (5%)

Providing over 70% of employment and 72% of GDP in developed economies, the service sector makes a significant impact on the economic landscape at the macro level. The unique qualities of the service sector are:

1. Production and consumption occur simultaneously.
2. It is intangible in nature.
3. The provision cannot be stored.
4. It is more performance than object based.

It is vital to promote service innovation designed to result in innovative, creative offerings to the market.

2. What is service innovation?

New or greatly improved service-product offerings are the base of service innovation. It is demonstrated by its interface and delivery with customers. Service providers need to project product innovativeness and creativity by understanding their customers' expectations. Designing the most effective ways to meet those expectations will result in success. Enterprises create niches that allow customers to experience the offering of superior products. As a result, enterprises expand their market with an opportunity to reduce costs while increasing sales. The diagram below provides a pictorial overview of service innovation in terms of its dimension and results.

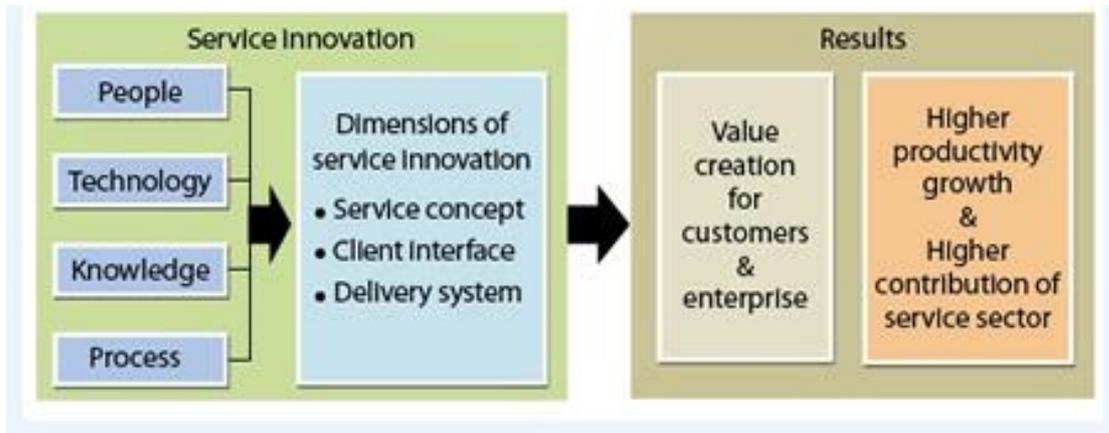


Figure 1: Service Innovation Framework – Dimension and Results

Source: http://www.apo-tokyo.org/productivity/pmtt_022.htm

3. Challenges of Service Sector

3.1 Reduced Interest in Service Sector Jobs

Service sector businesses reported in June 2015 that they were seeking employees to fill vacancies in frontline and operational positions. Singapore's stricter foreign-labour quotas created gaps in assorted businesses that have failed to attract qualified applicants. Several reasons have been offered by employers in the retail, food and hospitality sectors.



Figure 2: Faced with hiring challenges, retailers in Singapore are downsizing or terminating unfavourable leases

Source: <http://www.todayonline.com/singapore/jobs-available-services-sector-few-takers>

The major concerns from prospective employees are the frequent weekend shifts and lengthy hours required for this type of work. Business owners and managers report a large turnover as employees leave to seek work elsewhere. It affects operations and increases customer dissatisfaction in service and supply. Reduction in tourism has resulted in offers of part-time positions.

According to the Ministry of Manpower, first quarter 2015 labour figures for retail trade fell by 4,800. For the accommodation and food services, it fell by 1,800 employees.

3.2 Digital World Affects the Service Landscape

The number of services businesses being threatened by new digital upstarts is growing. What is the best way to protect growth prospects, bottom lines, and business models? Companies must create their own innovative styles to stay ahead of their latest competitors.

Service industry incumbents should review the recent changes in customer behaviour, technology, and data that indicate the direction new business methods should take. Innovation in customer approach and friendly operations can equal or surpass the digital disruptions introduced by retailers such as Amazon. What practices are drawing customers from traditional companies? Management has only to look at the procedures of business strategy from new companies like:

		
Uber (transportation)	Castlight Health (healthcare)	Airbnb (hospitality and hotels)

It is a challenge to change the way business has been done for decades. It shakes up the status quo and meets resistance from management and employees. It is much easier for large, established companies to revamp products than it is to transform the way services are offered. However, customers appreciate the way they are treated by the newer businesses and are willing to trade a long-lasting relationship for a friendlier, more conscientious company.

4. Frameworks and Enablers

The fundamental strategy of service innovation creates sustainable growth. Company market orientation and innovation practices affect more than performance. Innovation creates returns that exceed 50% of corporate revenue. What is the reason for it? It has a strong correlation between customer orientation and financial profitability.

Business model innovation is a form of service innovation that identifies a change in how a company does business rather than creating new services and products.

Three major benefits are:

- Increased returns.
- Enhanced customer value.
- Reduced risks for the company.

3.1 Frameworks

A comprehensive framework of service innovation includes several key dimensions as shown in the figure below. Features include:

- Design phases that are frequently repetitive rather than strictly linear.
- Design processes are closely linked to the phases.
- Problems, relationships, and design factors are defined with analytical methods.
- Implementation of culture, collaboration, and senior leadership in business models and human capital.

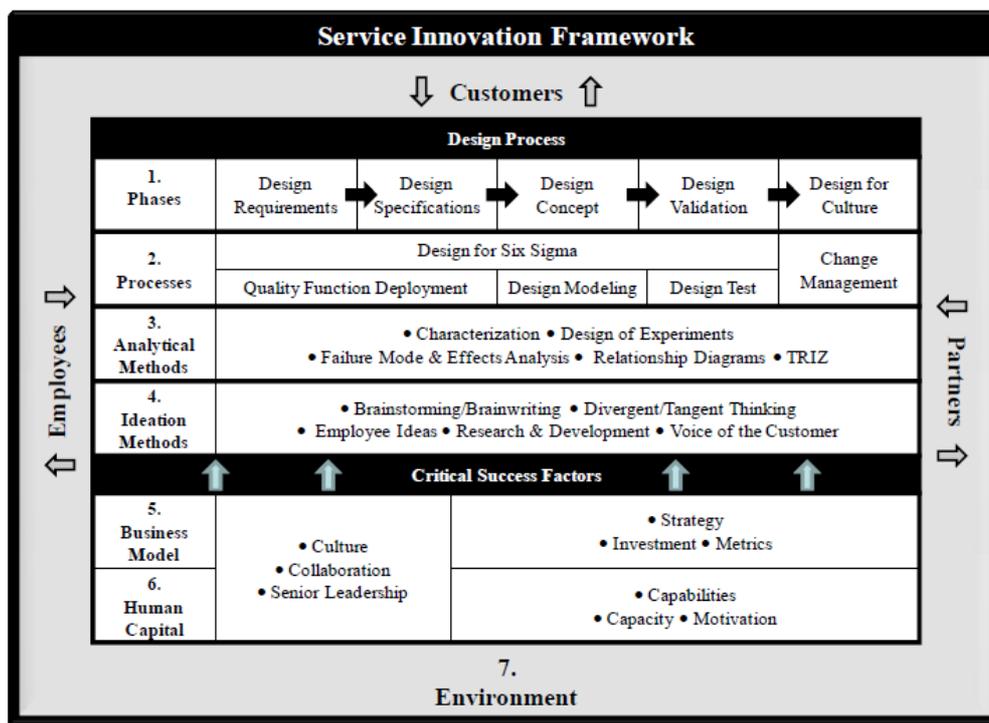


Figure 3: Service Innovation Framework – Phases, Process & Critical Success Factors
 Source: <http://scholarworks.rit.edu/cgi/viewcontent.cgi?article=1372&context=theses>

Another service innovation framework (see Figure below) looks at 4 dimensions of service innovation such as new service concept, new client interface, new service delivery system and technological options.

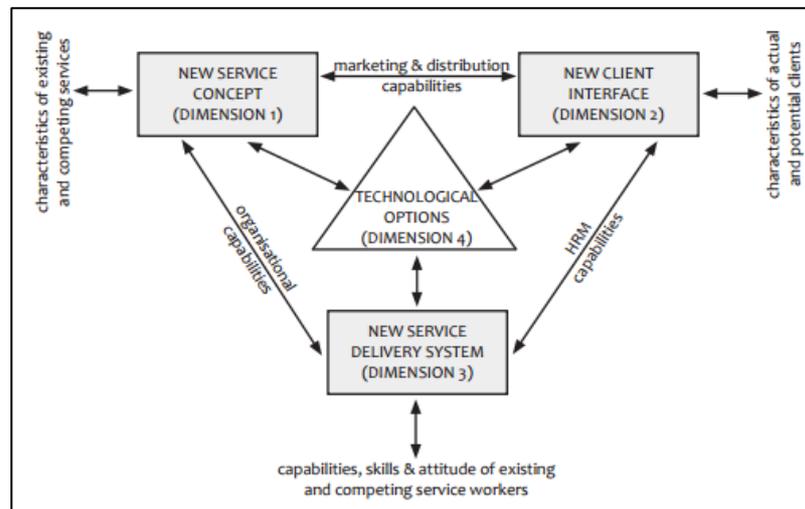


Figure: 4 dimensional model of service innovation

Source: <http://dare.uva.nl/document/2/80520>

Figure 5 provides the innovation patterns of five service industries using the 4 dimensional service innovation framework.

3.2 Tools and approaches to deliver service innovation

The use of appropriate tools and approaches to deliver service innovation is dependent on what an enterprise hopes to achieve. We explore some of the tools and approaches below:

1. Service blueprinting

The service system encompassing the process of delivery, role of customers and employees, and visible elements of the service can be mapped to show visual picture map called a service blueprint. Each process is broken down into logical components and definable tasks and steps. The service blueprint is reviewed to identify opportunities for mistakes or non-compliance according to customer standards. Mistakes are eliminated or reduce through relevant measures such as training to employees or change in process.

2. Six Sigma

This tool has been successfully used in the manufacturing sector and is equally relevant in the service sector. Six Sigma is a systematic method using the DMAIC define, measure, analyze, improve, and control approach, utilizing data and statistical analysis to enhance operational performance by eliminating variance and waste. This approach focuses on meeting customers' requirements by controlling variations in production, thus eliminating errors and defects. Applied in the service sector, it controls variations in service delivery by eliminating mistakes or non-compliance to customers' requirements.

Innovation dimension/ Service industry	Service concept	Client interface	Service delivery system	Technological options
Retailing	New formulas and brands (e.g. monobrand store), new locations (e.g. outlet stores), new combinations of formulas, new assortments aimed at specific groups of clients	Changed interaction between client and retailer i.e. forms of 'dehumanisation' & 'humanisation', shaping of virtual or interactive retailing, new electronic interfaces and self-service concepts	Intra- and extra organisational changes and new skills needed to supply (re-) new(ed) retailing services. Allow clients to co-produce services or add more personal service.	New ICT systems allow for optimisation of logistics, consumer profiling, self-service devices & development of (personalised) e-commerce applications
Transport & logistics services	Contract logistics, fourth party logistics service provider, synchronized production	Forward picking location/points of fit, cross docking and supply chain directors	E-auction/e-commerce, tracking and tracing by clients, on board computers (client signatures)	Containerisation (i.e. new scanning technology), on-board computer (navigation, motor-management), E-commerce
Financial services	Services dedicated to specific target group or stages in life aimed at creating life-time relationship, customer loyalty and integrated financial services	New automated distribution channels (ATM, internet, voice response, mobile). Self service in combination with personalized services and adding advisory element e.g. electronic banking, mobile banking	Customer Relation Management and Multi-Channel Management in combination with self-service. Redefinition of the role of bank offices and strict division between back office and front office operations	ICT is the major enabler for upstream information and transaction processing and downstream interfacing with clients and multi-channelling
IT services	Application Service Providers, data hotels/ hosting, virtual (outsourced) helpdesks	Dedicated contract managers, electronic distribution of software and updates and so on	Mixed project teams (with client personnel), on line help functions, virtual teamworking, advanced intranet-based knowledge management systems.	New generation of packaged and dedicated software e.g. CRM, ERP, supply chain software and so on
Technical engineering	Integrated 'one stop shopping' TE services and new contractual forms e.g. build, operate and transfer and other forms of outsourcing TE-functions	Closer ties with client through mixed project teams, account management systems and offices at client premises	Advanced competence & knowledge management systems and more flexible employability-based labour conditions	Tele-(co-) operations e.g. tele-maintenance, virtual project-teams, advanced project management systems and sharing of knowledge bases

Figure 5: Innovation patterns in five service industries:
Source: dare.uva.nl/document/2/80520

3. Business management solutions

The right business management solutions help firms to be innovative by creating an enabling environment for service providers to be innovative that help firms to connect with their customers effectively and remain economically linked to suppliers. Through effective data and information mining, better and faster decision making, more efficient financial management and compliance, and quicker responses to market changes are possible, as well as managing people more productively. Today's challenging marketplace requires organizations to innovate, and the way forward for service providers is to embrace service innovation.

It can start by eliminating the fear of failure and hierarchy. Not all projects will be successful. Senior management must have the appetite for failure and patience to see through strategy formulation, to execution. We must also learn to be less hierarchical and delegate more to empower frontline employees to better serve customers. By having too many rules we kill creativity.

American Express Singapore country manager Simon Kahn says the company has sought to be innovative in service by being one of the first to place a \$100 cap on the liability customers have to bear on unauthorised charges made on stolen cards. It also has an 'externship' programme, on which employees work with the businesses of cardmembers to gain insights into what business owners need, so that they can then innovate to meet those needs, Mr Kahn says.

4. Customer Participation

"Knowing how customers define value" is central to discovering service innovation opportunities. A typical five-stage iterative approach of customer participation towards creating personalised experience (Prahalad and Krishnan 2008) includes:

- 1) establishment of antecedent conditions for customer to participate;
- 2) development of motivations or customer benefits;
- 3) cost-benefit evaluation;
- 4) activation of co-creation process by choosing the stages of the "production-consumption" activity chain; and
- 5) evaluation of the effectiveness of the co-creation strategies against the cost-benefit analysis.

5. Community-based Innovation (CBI)

CBI is defined as a new online service innovation process that fully engages the firm's customer community from ideation phase right through to the test and launch phase of New Service Development. The community members become the sources of new service ideas as well as the co-creators and evaluators of the service designs.

6. Strategic Management for Innovation Success

Service innovation is technology-enabled but more human-centred and process-oriented. It is fundamental to reduce and intra-organisational conflicts and power struggle by "envisioning, energising and enabling" capabilities and having sound communication/coordination. It is also very critical for new service development to minimise organisational inertia/ resistance.

5. Case Study

5.1 (Local) – Singapore: Two Service Innovation Awards Won by Singapore State Courts

Two of the 2015 FutureGov Singapore Awards for service innovation were given to the State Courts. Presiding Judge of the State Courts, Judicial Commissioner See Kee Oon, noted it reflects the Court's commitment to offering timely dispute resolution and excellent court services.



Figure 6: State Courts Service Innovation - Integrated Criminal Case Filing and Management System
Source: <http://www.channelnewsasia.com/news/singapore/state-courts-conferred/1770734.html>

The Integrated Criminal Case Filing and Management System (ICMS) is an electronic case management system. The e-filing capability of the new system transformed the paper-based process of the criminal justice system to an electronic process. Criminal and youth court cases are tracked from registration through disposal. Enforcement agencies can start criminal matters, including prosecutions, electronically at any time of the day. It saves time by eliminating repetitious trips to the courthouse.

Stakeholders in the criminal justice system benefit from more efficient:

- Timely sharing, retrieval and exchange regarding case status, outcomes and court orders.
- Accurate, complete records.
- Improved accessibility, transparency, efficiency and effectiveness.

The second award concerns the Primary Justice Project (PJP). It's a system that permits parties to settle disputes in a faster, less expensive fashion. PJP offers paid, basic legal services at a fixed fee and uses alternative dispute resolution services at the pre-filing stage. A major benefit is resolving differences more quickly without irreparably damaging relationships between the parties.

5.2 Case Study (Global) – USA: Disney’s Billion Dollar Bet on a Magical Wristband

Disney recently implemented a new service that exhibits the innovation expected in its operation. This time it is a wristband with radio-frequency identification (RFID) chips. Directed at a better customer experience, the band provides guest control when they visit the various Disney theme parks and resorts. Called MagicBands, they have the power to open the person’s room at the hotel. It’s a magical hotel-room key. Visitors gain access to the park and easily schedule reservations for the rides.

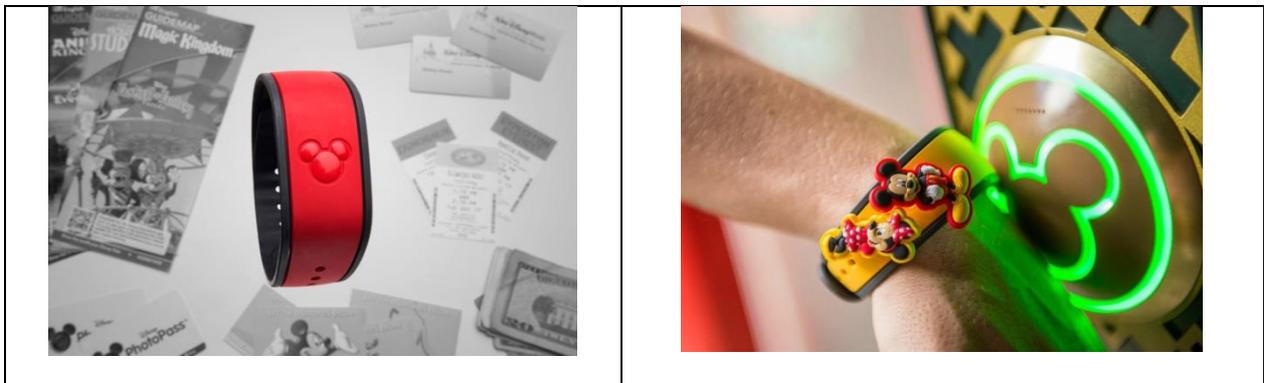


Figure 7: Disney’s Service Innovation - MagicBands
Source: <https://www.wired.com/2015/03/disney-magicband/>

The MagicBand provides access to the park and handles nearly every transaction a customer wants to make inside. Think of everything already done with cellphones. Apps activate lights at home, replace alarm clocks, and deliver online banking. The band displays the innovation that the public expects and demands in today’s world. Orlando’s Disney World demonstrates a magical method for areas like food service, where guests can reserve a meal ordering ahead at the center’s Be Our Guest restaurant.



Figure 8: Disney’s Be Our Guest restaurant, where your food manages to find you, without you every having to ask.

Source: <https://www.wired.com/2015/03/disney-magicband/>

Visitors wearing the Disney MagicBand arrive at the drawbridge entrance to the restaurant, where the host greets them by name. Another cheerful member of the restaurant crew invites the guests to sit in a location that appeal to them and make them feel comfortable. The wrist band alerts the staff to get ready the meal or meals previously ordered.

Kids are thrilled about the dining hall. It operates smoothly enough to be a well-organized cafeteria. Reminiscent of the Baroque dining area in Beauty and the Beast, the ambiance provides a feeling of contentment and expectation as guests wonder how the staff will find them in the bustling area. Soon, however, the server pushes an elegant serving cart with the correct dishes ready to serve.

What is the secret to success? A radio receiver transmits the signals of the MagicBands, transferring them to another receiver. Servers are aware of the order and where each guest is sitting. Technology has managed to create a service that delivers personally selected items without the customer needing to repeat the order. There is no need to wave your arms frantically in an attempt to the server's attention.

What better place to demonstrate inspired technology than Experimental Prototype Community of Tomorrow, better known as Epcot? The rubber wristbands are available in a variety of colors, including red, pink and green. Inside each band is a radio (similar to the ones found in cordless phones), long-lasting batteries, and a Radio Frequency Identification (RFID) chip. Guests are taught how to use them, particularly when selecting the parts of the park they want to visit. Bands arrive in the mail with each visitor's name etched on the selected color.

Sign up ahead of time for the "Magical Express" and our experience is improved almost immediately. You'll have a reservation on the park-bound shuttle once the plane lands in Orlando. Check into your hotel, confident that your luggage will be safely located at the carousel transported to your room because of the MagicBand experience.

Visitors tap the band at the gate and swipe their reserved rides. Watch for the Mickey icon that syncs with the band. Purchases can be made without standing in line to pay, as the band is linked to your credit card. Disney World has gradually evolved into a giant computer that's prepared to provide the latest technology and best service to its customers. More than 1,000 people worked in the band's design to reinforce a quality experience and satisfy customer expectations. An example of the success is its tear-away design that enables the band to fit nearly every size wrist.

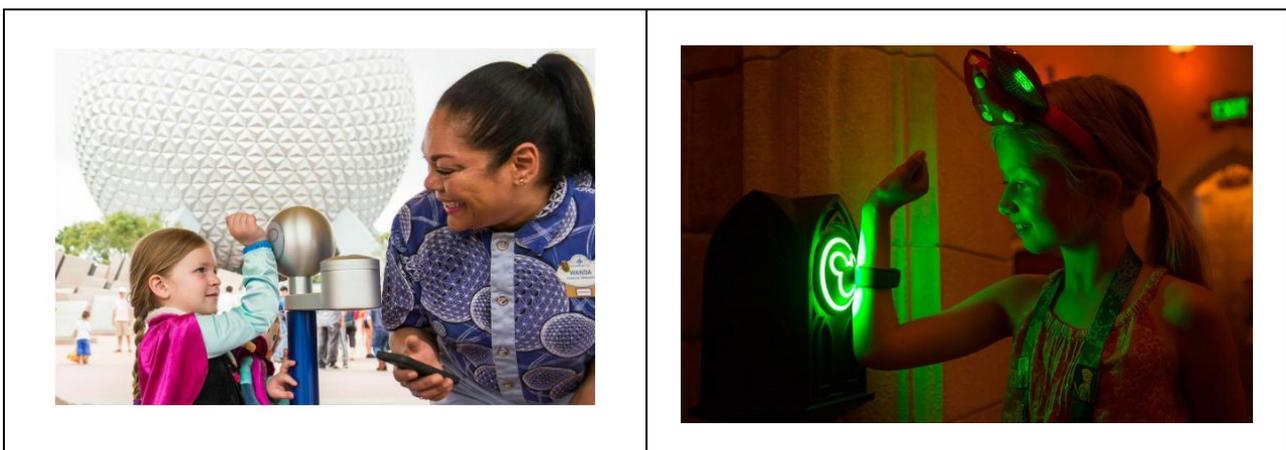


Figure 9: Disney's MagicBands - its tear-away design that enables the band to fit nearly every size wrist.

Source: <https://www.wired.com/2015/03/disney-magicband/>

6. Conclusion

Service innovation takes many forms and styles, but it has in common the desire to cater to customers in the quest for better service. Terms and concepts like transparency, customer satisfaction and quality performance indicate the race to increase and keep customers between businesses in the service industry. It requires thought and action based on frameworks and consumer interactions.

Imagination captures interest. Another way of attracting attention is creating a change or changes that save time and/or money. Easier processes that flow smoothly and are easy to use are enhanced by electronics and technology. Get started on your service innovation today by adopting some of the frameworks, tools and approaches in this article.

Recommended Readings

Title	Service design for business : a practical guide to optimizing the customer experience
Author(s)	Ben Reason, Lavrans Løvlie, Melvin Brand Flu.
Publisher	Hoboken, N.J. : John Wiley & Sons, Inc.
Year of Publication	2016
ISBN	9781118988923
Call Number	658.812 REA -[BIZ]
Remarks	Please log-in via http://search.nlb.gov.sg/

Title	Cross-industry innovation processes : strategic implications for telecommunication companies
Author(s)	Tobias Hahn ; preface by Rüdiger Zarnekow.
Publisher	Wiesbaden : Springer Gabler.
Year of Publication	2015
ISBN	9783658088262
Call Number	R621.382068 HAH
Remarks	Please log-in via http://search.nlb.gov.sg/

Title	Services and innovation
Author(s)	Faïz Gallouj and Faridah Djellal
Publisher	Cheltenham, UK : Edward Elgar Publishing Limited
Year of Publication	2016
ISBN	9781783472932
Call Number	338.4 SER
Remarks	Please check availability via http://search.nlb.gov.sg/

Publications which are in the holdings of the National Library or Public Libraries are denoted by [call number] at the end of each reference. Please check the library's online catalogue to confirm the availability.

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